Creel Census and Biological Data from the Lake Trout Sport Fishery on Great Bear and Great Slave Lakes, Northwest Territories, 1977-78

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by

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ABSTRACT

Moshenko, R.W., and D.V. Gillman. 1983. Creel Census and biological data from the lake trout sport fishery on Great Bear and Great Slave lakes, Northwest Territories, 1977-78. Can. Data Rep. Fish. Aquat. Sci. 389: vi + 73 p.

Results of information collected from a creel census and a biological sampling program conducted at four sport fishing lodges on Great Bear and Great Slave lakes in 1977 and 1978 are presented in tabular and graphic form and briefly described. Creel census data includes catch, catch/effort and harvest statistics. Biological information includes length, weight, age, sex, maturity, length and weight conversions, and diet and movements of lake trout, Salvelinus namaycush (Walbaum).

Key words: angling; catch/effort; exploitation; fishery management; gillnetting; life history; monitoring; sport fishery; Salvelinus namaycush.

RESUME

Moshenko, R.W., and D.V. Gillman. 1983. Creel Census and biological data from the lake trout sport fishery on Great Beat and Great Slave lakes, Northwest Territories, 1977-78. Can. Data Rep. Fish. Aquat. Sci. 389: vi + 73 p.

Les résultats du recensement et de l'échantillonnage biologique, effectués en 1977 et en 1978 auprès de quatre pavillons de pêche sportive sur les lacs Great Bear et Great Slave, sont brièvement décrits et présentés sous forme de tableaux et de graphiques. Les données du recensement portent sur les prises et le rapport prises/effort, et la récolte et celles de l'échantillonnage biologique sur la longueur, le poids, l'âge, le sexe, le degré de maturité, le régime alimentaire et les mouvements des touladis, Salvelinus namaycush (Walbaum), ainsi que sur les conversions de longueur et de poids.

Mots-clés: pêche à la ligne; prises/effort; exploitation; gestion des pêches; pêche aux filets maillants; cycle évolutif; contrôle; pêche sportive; Salvelinus namaycush.

INTRODUCTION

Studies have been carried out, by the Department of Fisheries and Oceans (DFO), on the lake trout sport fisheries of Great Bear and Great Slave lakes since 1972. The creel census and biological sampling programs are intended to provide information on the sport fishery harvest and on the life history of lake trout, Salvelinus namaycush (Walbaum), in order to effectively manage these fisheries. During the period 1972 to 1974, fisheries at all major lodges (Fig. 1) were studied annually (Falk et al. 1973, 1974a, b, 1975). As a result of baseline data obtained from these intensive studies, the program was modified in 1975 whereby sport fisheries at the lodges were monitored on a rotational basis (one lodge/lake/year) such that each lodge on Great Bear and Great Slave was studied at least once over a five-year period (Moshenko and Gillman 1978a). In addition, the program was expanded in 1977 to include experimental gillnetting and tagging at the lodge areas under study.

This report presents the results of the program undertaken in 1977 and 1978 at four lodges on Great Bear and Great Slave lakes. Additional data is provided on weight and length conversions and diet of lake trout, and on movement patterns of lake trout tagged between 1973-77 at Taltheilei Narrows on Great Slave Lake.

MATERIALS AND METHODS

STUDY AREA

The creel census and biological investigations were carried out in 1977 at Plummer's Great Bear Lake and Great Slave Lake lodges and in 1978 at Branson's Lodge on Great Bear Lake and Arctic Star Lodge on Great Slave Lake (Fig. 1). Figures 2 to 5 indicate the specific location of the four lodges studied and the principal areas fished for lake trout. The potential fishing area is based on a guideline adopted by the Tourism Department of the Northwest Territories Government of 4.0 kilometers (2.5 miles) of shoreline per guest bed. The principal area fished is based on observations by DFO personnel stationed at the locations and represents fishing areas frequently used by the angler-guests throughout the entire season. Additional areas are utilized by fishermen at most locations on an intermittent basis.

LODGE OPERATIONS

Details concerning the operation of sport fishing lodges on Great Bear and Great Slave lakes have been covered in previous reports by Falk et al. (1973, 1974a), and Moshenko and Gillman (1978a). The lodges tend to be large isolated sport fishing establishments which cater mainly to anglers from the United States. Lake trout angling provides the major attraction but some lodges also offer fishing for Arctic grayling, Thymallus arcticus (Pallus), northern pike, Esox lucius Linnaeus, and walleye, Stizostedion vitreum (Mitchill) as well as side trips to the Arctic coast for anadromous Arctic charr, Salvelinus alpinus (Linnaeus). The usual length of stay is one week and guests are rotated on or near the weekend. With the exception of rotation days and depending on the weather, angler-guests typically spend from early morning to late afternoon fishing. They usually fish two per boat and are under the direction of a guide.

CREEL CENSUS STUDY

Interview procedure

Information pertaining to the methods employed by census workers has been described previously by Falk et al. (1973, 1974a) and Moshenko and Gillman (1978a). Upon returning from a day's fishing as many anglers as possible were questioned as to the number of fish caught, released, retained and used for shore lunches, by species, as well as the hours and location fished.

The census worker also recorded the number of anglers not interviewed and/or those not fishing on a daily basis and the total number of anglers present at the lodge on a weekly basis.

Two census record forms were used by field personnel (Moshenko and Gillman 1978a). These were: i) a catch record form on which catch, effort and location information was recorded by species for each angler interviewed, and ii) a summary form on which catch, effort, sample and location information was recorded by species on a daily and weekly basis.

On-site or creel surveys may often be subject to interview and response biases. Sinclair and Morley (1975) describe a corrective procedure; however, in our studies the likelihood of these biases occurring is minimized by providing on-site staff training and by using standardized interview procedures. The "length of stay" and "frequency of use" biases are non-applicable due to the type of lodge operation.

Lake trout harvest

Procedures followed in calculating the total harvest of lake trout from individual lodges have been outlined in detail by Falk et al . (1974a). During the 1975 field season the methods employed by the creel census workers and the procedures for calculating the harvest of lake trout in 1974 were modified and refined to the point where a high degree of accuracy may be expected. In addition, a substantial data base has been collected on which estimations or predictions can be made. Yields per surface area for the lodges were calculated by dividing the total harvest by both the potential area available and the area principally fished. The definitions and explanations given below will be useful in interpreting data outlined in the Results and Appendices.

Number caught: This is the number of fish caught by anglers and includes fish taken for use in shore lunches.

Number retained: This is the number of fish brought back to the lodge by anglers but does not include fish taken for use in shore lunches.

Retained catch: For the lodges censused during 1977 and 1978 the number of lake trout retained by anglers was calculated in three stages: first by considering the number of days worked during the census period and the actual number of anglers interviewed; second by the total number of interviews possible during the census period (i.e., including anglers not interviewed and days not worked), and finally by extrapolating to include portions of the angling season not censused. The weight of the retained catch was subsequently obtained by multiplying this number by the average weight of lake trout sampled.

The number of fish retained includes trophy lake trout, and those to be filleted, to be dressed for "bakers" or, at some lodges, smoked and/or steaked. The portion of the retained catch sampled for biological data usually excludes the trophy fish. These trophy lake trout, usually greater than 7 kilograms (15 pounds) and destined for taxidermy purposes, up until 1976, were often not available for length and weight measurements. Therefore, the average length and weight of the sampled catch is often biased toward the smaller fish. During 1977 and 1978 a large portion of these trophy fish were sampled at all locations (except Plummer's Great Bear Lodge) to avoid this bias and allow analysis of the total retained catch.

Shorelunches: In addition to the number of lake trout retained by anglers, fish are also taken for use in shore lunches. The method of calculation was similar to that followed for determining the retained catch. The number of trout taken for shore lunches was calculated first by considering the number of angler-interviews; second by including the total number of interviews possible during the census period and finally by extrapolating to include the portion of the season not censused. The weight of trout used in the shore lunches was subsequently obtained by multiplying this number by the average weight of the lake trout sampled.

Release mortality: Through a catch-release study carried out in the vicinity of Great Slave Lodge during June 1973 it was found that 7.0% of lake trout caught on treble hooks died after being held for four days (Falk et al. 1974c). This percentage was applied to the number of trout released over the season to estimate the number which would probably die as a result of hook or handling damage.

The total harvest is an estimate arrived at by summing the retained harvest catch, shore lunches and release mortality.

Trophy lake trout: Trophy fish had not been previously sampled in creel operations (with the exception of Great Bear Trophy Lodge in 1976). To allow accurate comparison to previous samples, analysis was conducted on the 1977 and 1978 creel samples with and without trophy fish included. Harvest rates were calculated excluding trophy fish weights; figures and tables using mean weights are noted when both calculation values are present. Harvest estimates calculated with trophy fish excluded are conservative as the average weight of lake trout sampled is lower resulting in a decreased total harvest value. However, by employing consistant methodology it is possible to monitor the harvest with a relatively high degree of accuracy and to determine if regulation changes are effective in reducing the harvest of lake trout.

Moshenko and Gillman (1978a) summarized all available creel census data for the sport fishing lodges on Great Bear and Great Slave lakes through to 1976. Information collected at the four locations sampled during 1977 and 1978 have been included in the updated summary (Table 8).

BIOLOGICAL INVESTIGATION

Fish sampling

Prior to 1977 biological information was gathered solely from sampling of a random portion of the angler's daily retained catch. However, from 1977 on this was augmented with sampling of lake trout from experimental netting, from tagging (live sample-length and weight only) and from trophy fish both at the lodges and at a taxidermy shops. One particular taxidermy shop, which processes many of the trophy lake trout from both lakes, co-operated by providing length, weight and otoliths (for aging) on trophy lake trout taken at the lodges under study.

Fish were sampled for fork length (±5 mm), total weight (±25 g), sex and maturity. The relative stage of maturity was determined by examination of the gonads and coded by reference to a scale as follows:

Sex		Maturity	
F	M	stage	Description of gonads
1	6	immature	- virgin fish, gonad thin and threadlike, often incomplete
2	7	maturing	- virgin or non-virgin fish not spawning in current year, gonad full length, firm, eggs of small size, gonads partially filling body cavity
3	8	mature	- fish spawning in current year, gonad full size filling body cavity, eggs prominent, full size
4	9	ripe	- mature fish in spawning condition, eggs translucent, milt or eggs expelled under slight pressure
5	10	spent	- mature fish completed spawning, gonads collapsed with ruptured blood vessels prominent

Otoliths were obtained for aging purposes from the majority of the sampled lake trout by splitting the skull and locating the sagittal otolith with forceps. They were stored dry in envelopes marked with the sample information.

Experimental netting

Gill nets (38 mm stretched mesh) were set at all lodge areas (except Plummer's Great Bear) from late June to early September. These small mesh nets, which tend to entangle trout by their teeth rather than the gill areas, were used to facilitate live-capture and reduce netting mortality. Dead fish were sampled while live fish were retained for tagging and released.

Weight and length conversions

A weight conversion study was carried out in 1977 at Plummer's Great Bear and Great Slave lodges to obtain information for conversions factors from the forms (i.e. fillets) currently used by anglers to round (total) weights. DFO personnel stationed at the lodge first obtained a round weight (±25 g) prior to the filleting of the fish by lodge guides. The carcass was then weighed to obtain the percentage of trout utilized as fillets. Similar methods were employed to obtain data on the conversion of round weight to dressed (gills and viscera removed) and dressed-headless (head, gills and viscera removed) forms. Samples from the lodges for these conversions were augmented from trout caught in the experimental gill nets. Here, filleting etc. was done by DFO personnel, using the technique of the lodge guides.

During 1978, lake trout were sampled at both lodges for fork, standard and total length (±1 mm). Lagler (1956) defined these as follows: 1) fork length is measured from anterior most extremity (tip of the snout or the upper lip) to the notch in the tail fin; 2) standard length is measured from the anterior extremity to the end of the vertebral column or caudal (tail) base, and 3) total length is measured as the greatest possible length with mouth closed and caudal (tail) rays squeezed together to give the maximum over-all measurement.

Diet

Gross examination of lake trout stomachs was conducted during 1978. Contents were identified under four major categories: fish (species if possible), invertebrates (e.g. amphipods), insects (order) and other material (vegetable or undigestible matter i.e. gravel).

Tagging

Lake trout live-captured by gill nets (mostly 38 mm mesh) were sampled for length (and weight when possible) and tagged using a Dennison tagging gun and blue plastic Floy tags. The majority of fish were released immediately after tagging, however, some were held in cages for a 24 h period to observe the effects of gillnetting and tag application. Equipment and methods were similar to those employed in 1973 (Falk et al. 1974c). Lake trout were tagged at Plummer's Great Slave Lodge (N=512), Branson's Lodge (N=203) and Arctic Star Lodge (N=505).

Aging and data analysis

In the laboratory the convex surface of the otolith was ground on a fine carborundum stone to expose the annual growth zones. The otolith was then immersed in a 3:1 solution of benzylbenzoate and methyl salicylate on a depression slide and read under a dissecting microscope.

Annual mortality rates (natural and fishing) were calculated using the method (all ages known) outlined by Robson and Chapman (1961). The total annual mortality is defined as the number of fish which die during a year, divided by the initial number (Ricker 1975). Thus, if the mortality rate was 20%, then among the larger fish beyond the age where they are fully vulnerable to the fishery, of every 100 fish alive at a given time, 20 are expected to die during the next year. The right hand descending portion of a catch curve may be used to estimate annual mortality rates if the following assumptions can be met

i) constant survival or mortality rates over the range of age-classes, and with time;
ii) constant year-class strength (even recruitment), and
ii) all fish beyond some age are equally vulnerable to the harvesting gear.

Ricker (1975) indicates that the modal age in the catch curve will commonly lie quite close to the first year in which recruitment can be considered effectively complete. Recruitment is defined as the addition of new fish to the vulnerable population by growth from among smaller size categories. In our particular case with lake trout, probably one unusable age-class intervenes between the first usable age and modal age (or second of two nearly-equal ages). When annual mortality is moderate or small (50% or less), at the beginning of recruitment at least, there are usually two adjacent ages having the same number of fish, with the mode falling sometimes at the median age of recruitment, sometimes in the next older age. In our calculations, we first selected the modal age-class from the catch curve and then chose the next older age-class to be sure that all fish beyond this age are at the age of effectively complete recruitment and fully susceptible to the gear. Ricker (1975) further states that deviations from the basic assumptions stated above often result in a non-linear right limb of the catch curve, especially from fluctuations in recruitment from one year class to the next. With our data, a small sample size considering the large age span may also be a contributing factor to the very irregular appearance of some of the catch curves. It is very difficult to accept estimates when this irregular distribution of data is used. To avoid this irregularity from unstable recruitment, samples from successive years may be combined (Ricker 1975). Due to our rotational monitoring, data from successive years is unavailable. Instead, Falk et al. (1974b) used a "moving mean" (average of two successive age-classes) to smoothen out the irregularities of the frequency distribution at age-classes in the right hand descending limb of the catch curve. Annual mortality rates were calculated using both the actual or irregular frequency data, and the moving means.

The length-weight relationships were determined by the following power equation:

$$\text{Log}_{10} W = a + b (\log_{10} L);$$

where W = total weight in grams
a = Y-intercept
b = slope of the regression line
L = fork length in millimeters

The condition factors (K) were calculated from the formula

$$K = \frac{W \times 105}{L^3}$$

The K-values indicate a relative measure of robustness, plumpness or fatness of the fish.

Data collected during the study were analyzed using a programmable calculator (HewlettPackard model 9810-A) and computer facilities based at the University of Manitoba.

RESULTS

CREEL CENSUS

Summary results from the 1977 and 1978 creel census on Great Bear and Great Slave lakes are presented in Tables 1 to 5. A brief comparison of results from 1971 to 1978, illustrating number of anglers, number of lake trout caught per angler-hour, harvest per angler and total season harvest is shown in Table 6. Table 7 gives sport fishing license sales for all lodges on these two lakes for 1977 and 1978.

The number of lake trout retained per angler-day is more a reflection of lodge policy rather than a direct relation to angler success (catch per angler-hour). Mean size of lake trout retained (for both lakes) prior to 1977 was 2.9 kg (Moshenko and Gillman 1978a), however, those retained in 1977 and 1978 were slightly larger with an average of 3.8 kg for Great Bear and 3.3 kg for Great Slave. Generally, at the four lodges studied, catch per angler-hour since 1973 was variable (0.93 to 0.32); however, even though the mean size of fish retained was larger in 1977 and 1978 the total harvest per angler in these years is significantly lower than previously for most of the four lodges (Table 6). Thus, anglers are releasing more and retaining fewer but larger lake trout. A fish conservation poster has been designed to promote proper handling and release of angled fish to reduce release mortality (Fig. 16).

On Great Bear Lake, both Branson's Lodge and Plummer's Great Bear Lake Lodge, in comparison to previous years, had in 1977 and 1978 a lower angler success (catch per angler-hour) and a much lower harvest per angler and total season harvest. However, on Great Slave Lake, both Arctic Star Lodge and Plummer's Great Slave Lake Lodge, in comparison to previous years, had in 1977 and 1978 a much higher angler success and a slightly higher (Plummer's Great Slave Lake Lodge) and slightly lower (Arctic Star Lodge) harvest per angler. Both lodges on Great Slave Lake showed a much higher harvest in comparison to 1974, primarily due to increased number of angler-guests. Note that the fishery at Arctic Star Lodge has been studied, when operating near maximum guest capacity, only in 1978, thus, a further study should be carried out before any deduction are made regarding the status of this fishery.

BIOLOGICAL INVESTIGATION

Biological data on lake trout sampled from four lodges on Great Bear and Great Slave lakes during 1977 and 1978 is provided by length interval in Tables 9-34 and by age interval in Tables 36-48. Table 50 gives a summary of lake trout data from creel sampling at these four lodges from 1972 to 1978.

Length-frequency distribution

Figures 6 to 9 illustrate the length-frequency distribution for lake trout from lodges studied during 1977 and 1978 in comparison to previous data. Mean fork length values for lake trout at the four lodges in 1977 and 1978 and in previous years have remained relatively unchanged (within the lodge areas).

Length-weight distribution

Details on the logarithmic relationships of length-weight for the 1977 and 1978 data and for previous years for the four lodges are given in Table 35.

Age, growth and maturity

Distribution of age frequencies are illustrated in Fig. 10 to 13 and summarized in Table 50. Data from creel sampled lake trout indicate relatively stable mean ages at both lodges on Great Bear (23.0-26.8 yr) and especially at Plummer's Great Slave Lake Lodge (16.1-17.7 yr).

Details on the growth in length and weight by age are provided in Tables 36-48.

Table 50 indicates mean length and weight of sampled trophy lake trout at the four lodges. Mean values for Great Bear lodges were: length (982 and 1 038 mm) and weight (11 532 and 12 979 g) and for Great Slave lodges were: length (887 and 967) and weight (9 721 and 10 969).

Catch curves are presented in Fig. 14. Table 49 provides the annual mortality rates. Trout at the four lodges had mortality rates of 17.0-20.5%, high in most cases when compared to the data from the earlier 1970's.

Sexual maturity was first reached at age 18 (578 mm; 2560 g) at Plummer's Great Bear Lake Lodge, age 20 (553 mm; 1900 g) at Branson's Lodge, age 12 (499 mm; 1493 g) at Plummer's Great Slave Lake Lodge, and age 14 (465 mm; 1227 g) at Arctic Star Lodge. Lake trout on Great Slave attained sexual maturity 4 to 5 years earlier and at a smaller size than on Great Bear Lake.

Weight and length conversions

Table 51 indicates weight conversion values from round (whole) weight to headless dressed to fillet form. Conversions from 250 fish showed 41% and 39% flesh on retained fillet and 1.70 and 1.64 conversion factor (fillet to round form) for Great Bear and Great Slave respectively. Falk et al. (1973) obtained similar values of 40% retained on 66 lake trout from Great Bear Lake during 1972. Keleher (1964) found dressed (head-on) lake trout from Great Slave Lake with mean values of 82.5% retained flesh on fillet with a conversion factor of 1.21 and dressed (headless) trout values of 68.9% retained flesh on fillet with a conversion factor of 1.53. These values agree favourably with our 1977 results. However, Kennedy (1950) gave conversion factors of 1.20 for dressed (head-on) and 1.66 for dressed (headless).

Table 52 shows a comparison of standard, total and fork length for lake trout from the two lakes.

Diet

Table 53 presents the food items found in 956 lake trout stomachs on Great Bear and Great Slave lakes. Both fish remains, especially lake cisco, Coregonus artedii, and insect remains were the most important foods. However, on Great Bear Lake at least three trout (1%) indicated cannibalism. Johnson (1975) indicated a cannibalism evidence of 2.8% during his 1963-65 study here.

Movements

Data on 63 recaptured lake trout that were tagged in the vicinity of Plummer's Great Slave Lake Lodge, at Taltheilei Narrows, are presented in Table 54 and summarized in Fig. 15. Most fish were recaptured within 5 km of the site of tagging, however, several were recaptured in the Reliance area (136 km) and westward to Matonabee Point (140 km) and Sulphur Point (268 km).

ACKNOWLEDGMENTS

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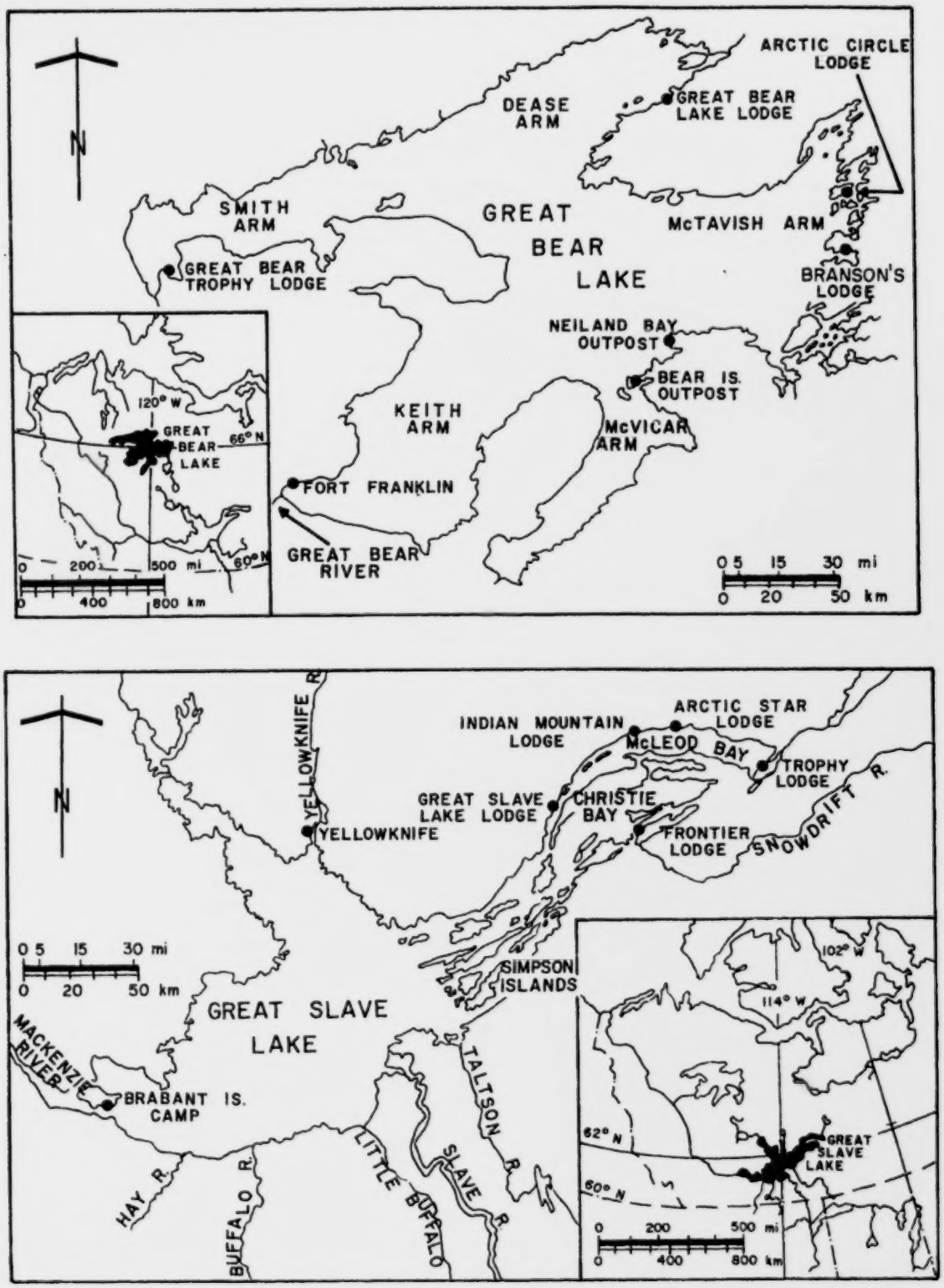

Fig. 1. Map of Great Bear Lake and Great Slave Lake showing the location of sport fishing lodges.

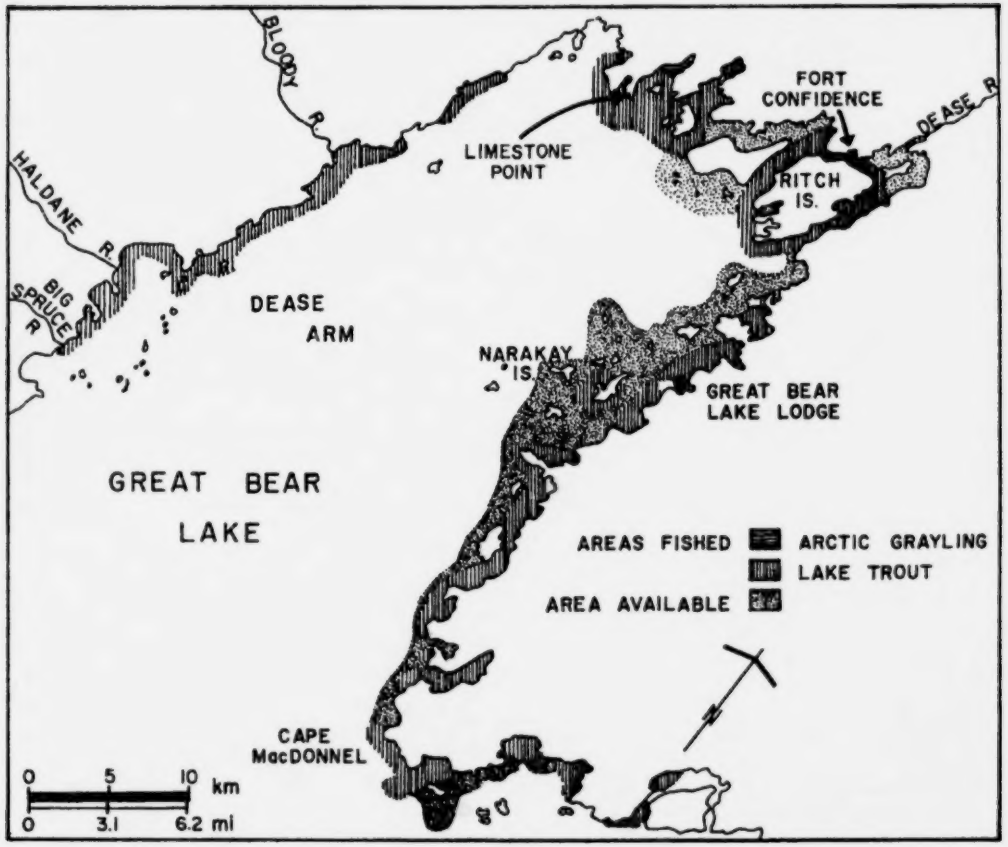

Fig. 2. Location of Plummer's Great Bear Lake Lodge showing the areas fished.

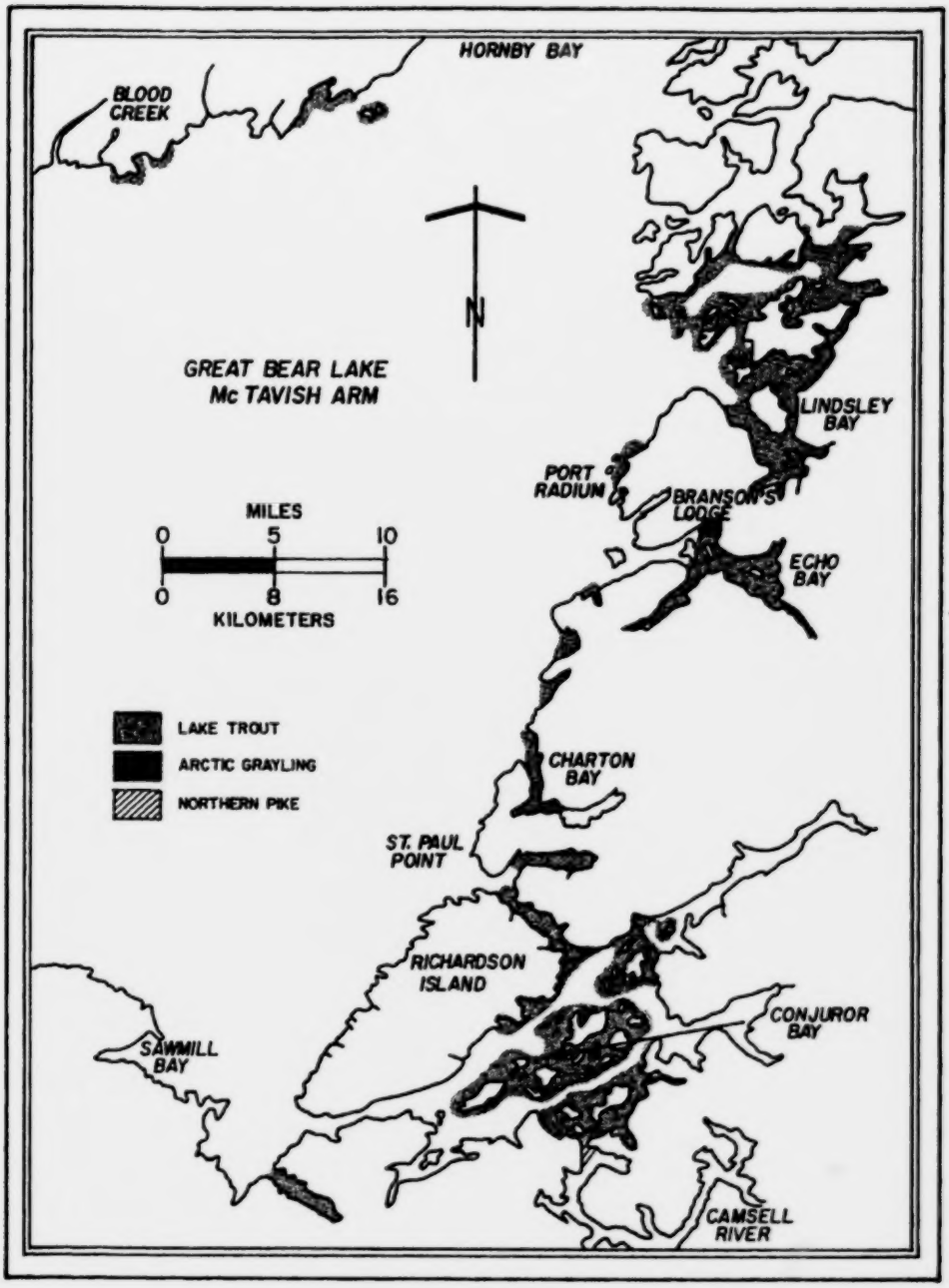

Fig. 3. Location of Branson's Lodge showing the areas fished.

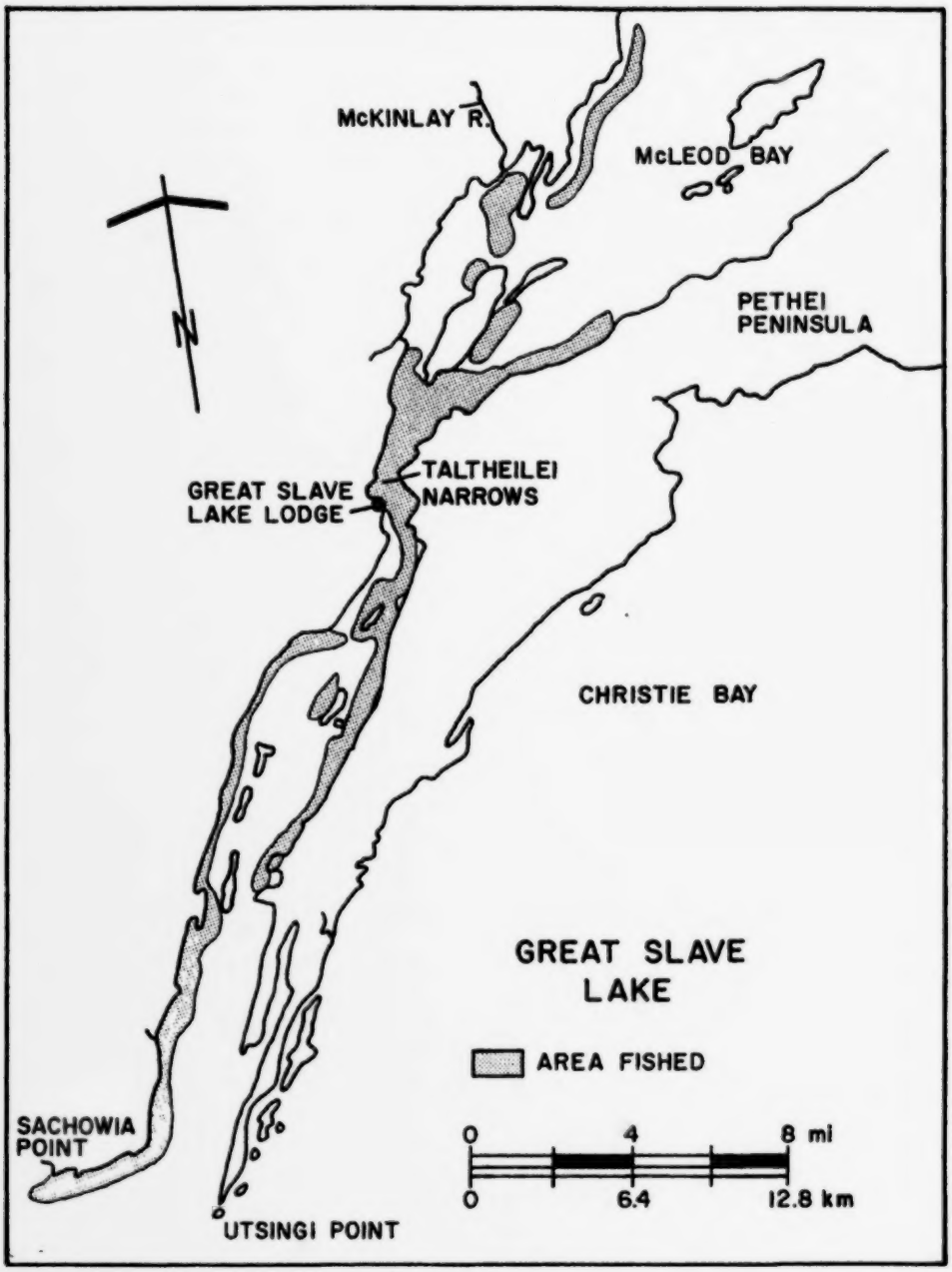

Fig. 4. Location of Plummer's Great Slave Lake Lodge showing the areas fished.

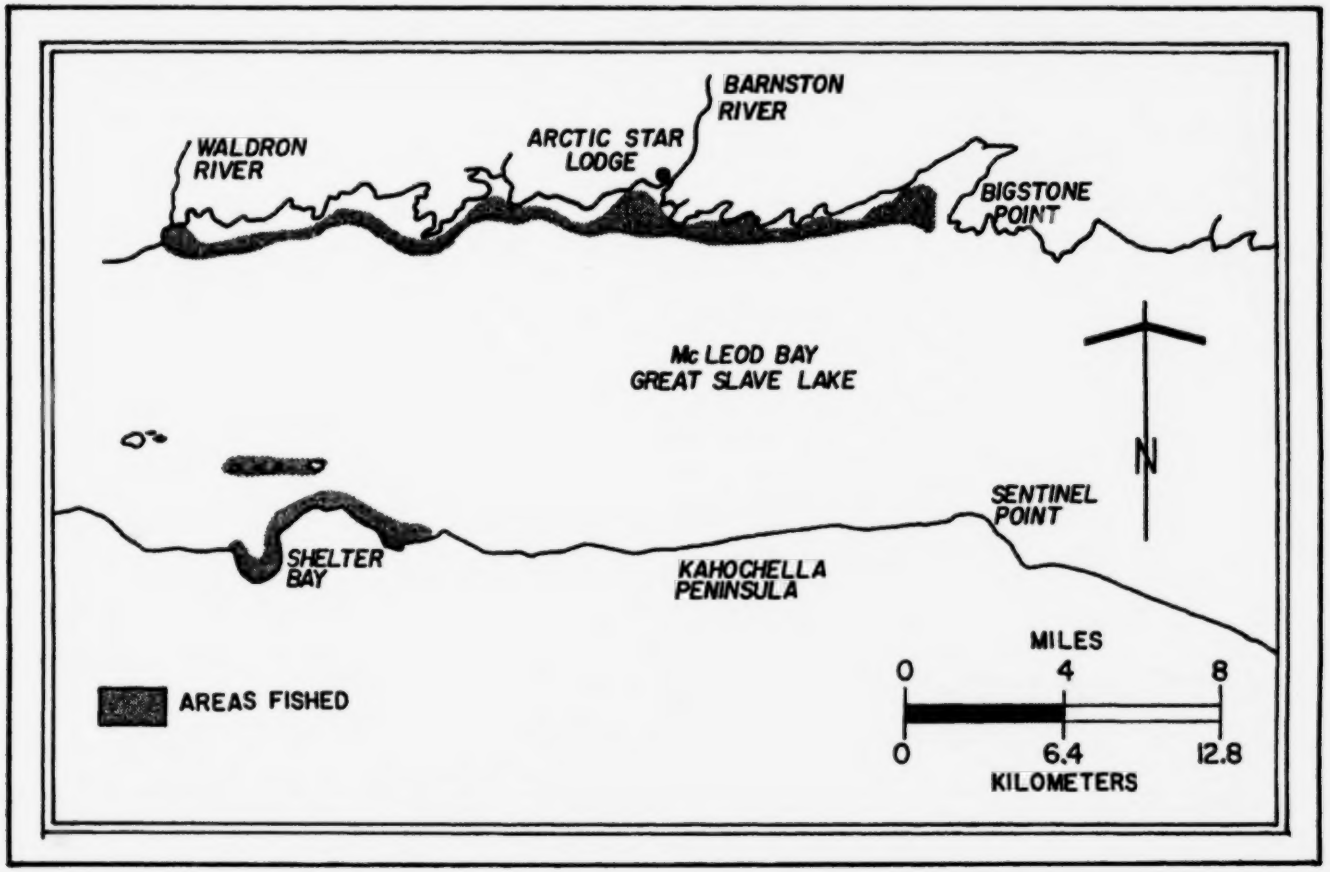

Fig. 5. Location of Arctic Star Lodge showing the areas fished.

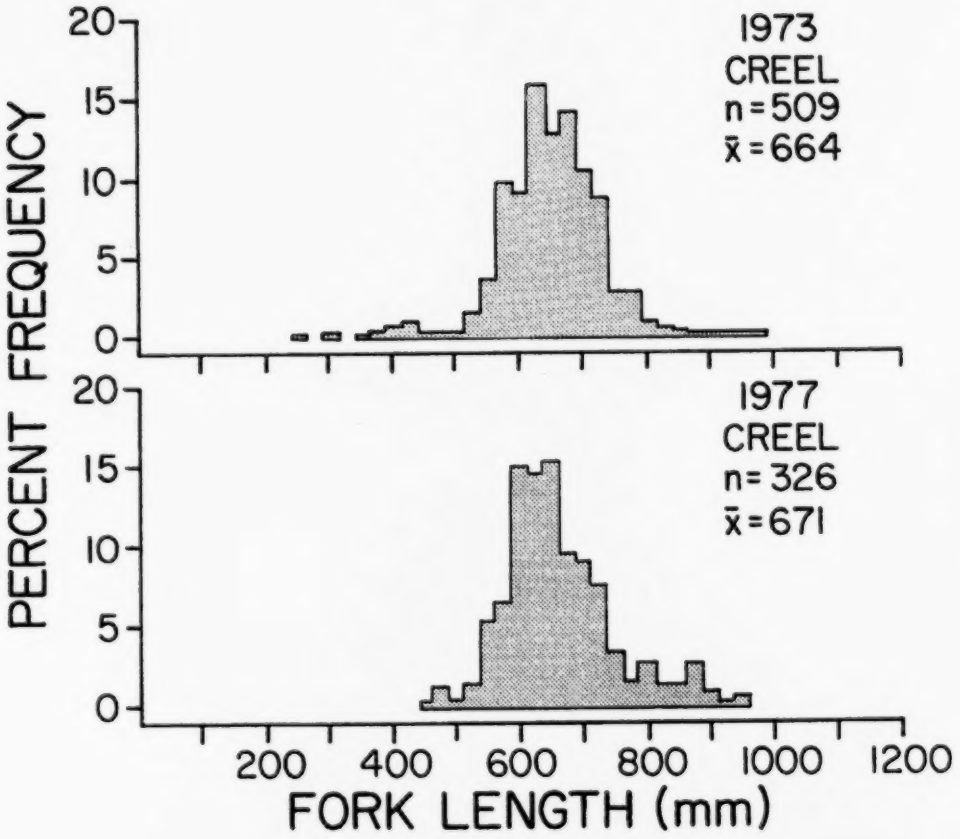

Fig. 6. Length-frequency distribution for lake trout from Plummer's Great Bear Lake Lodge. Data for 1973 from Falk et al. (1974c).

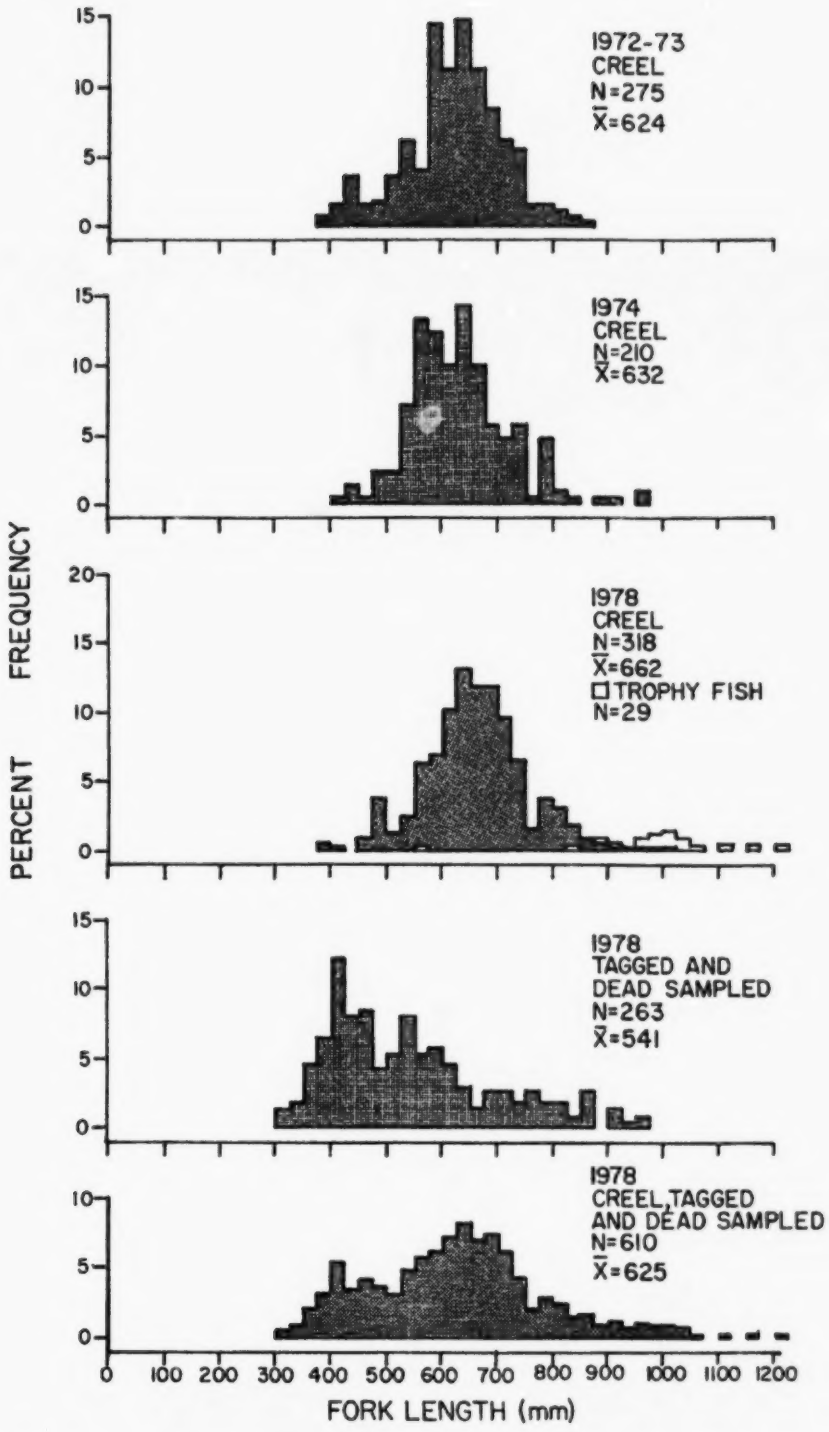

Fig. 7. Length-frequency distribution for lake trout from Branson's Lodge. Data for 1972-73 and 1974 from Falk et al. (1974c) and Moshenko and Gillman (1978b), respectively.

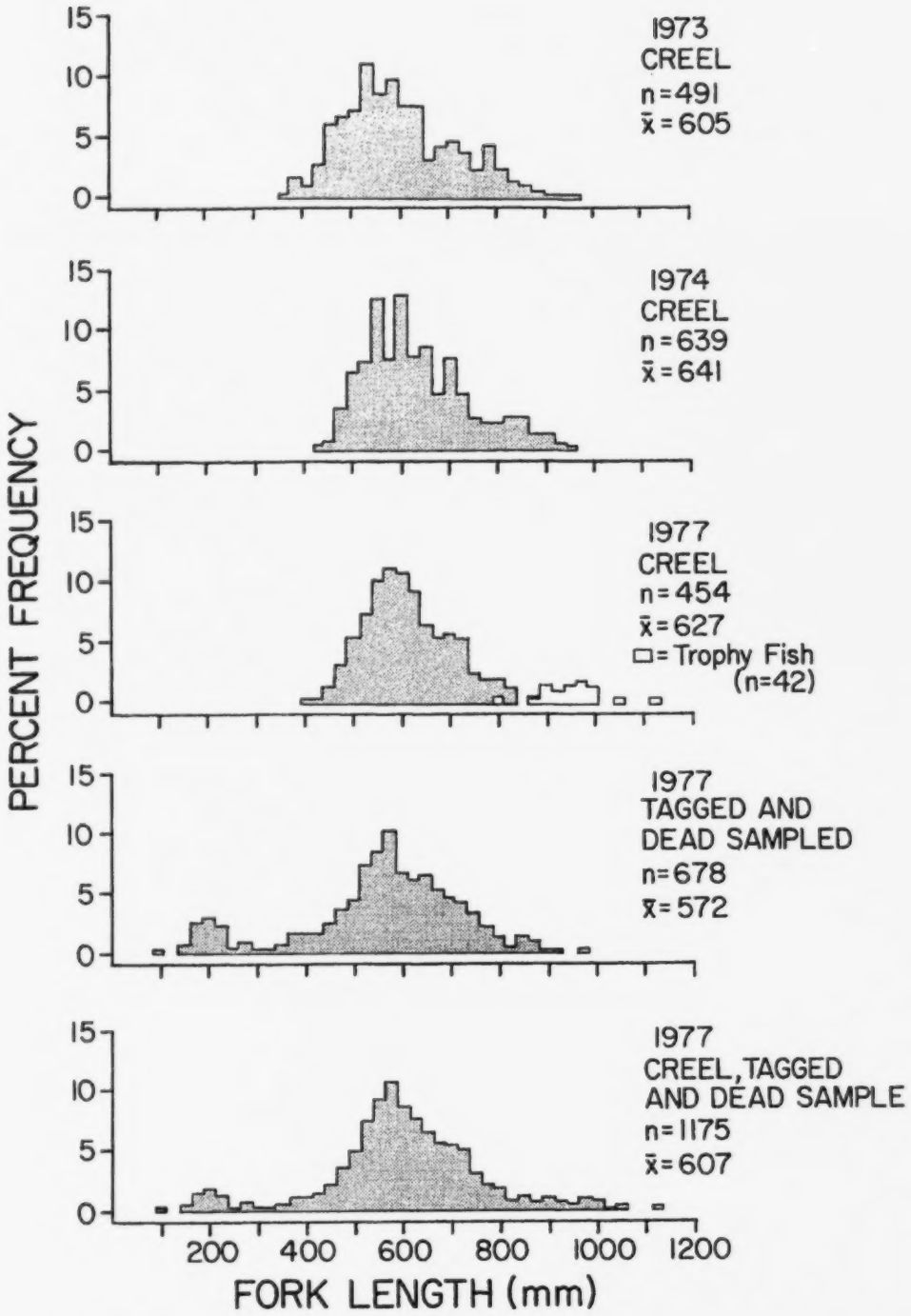

Fig. 8. Length-frequency distribution for lake trout from Plummer's Great Slave Lake Lodge. Data for 1973 and 1974 from Falk et al. (1974c) and Moshenko and Gillman (1978b), respectively.

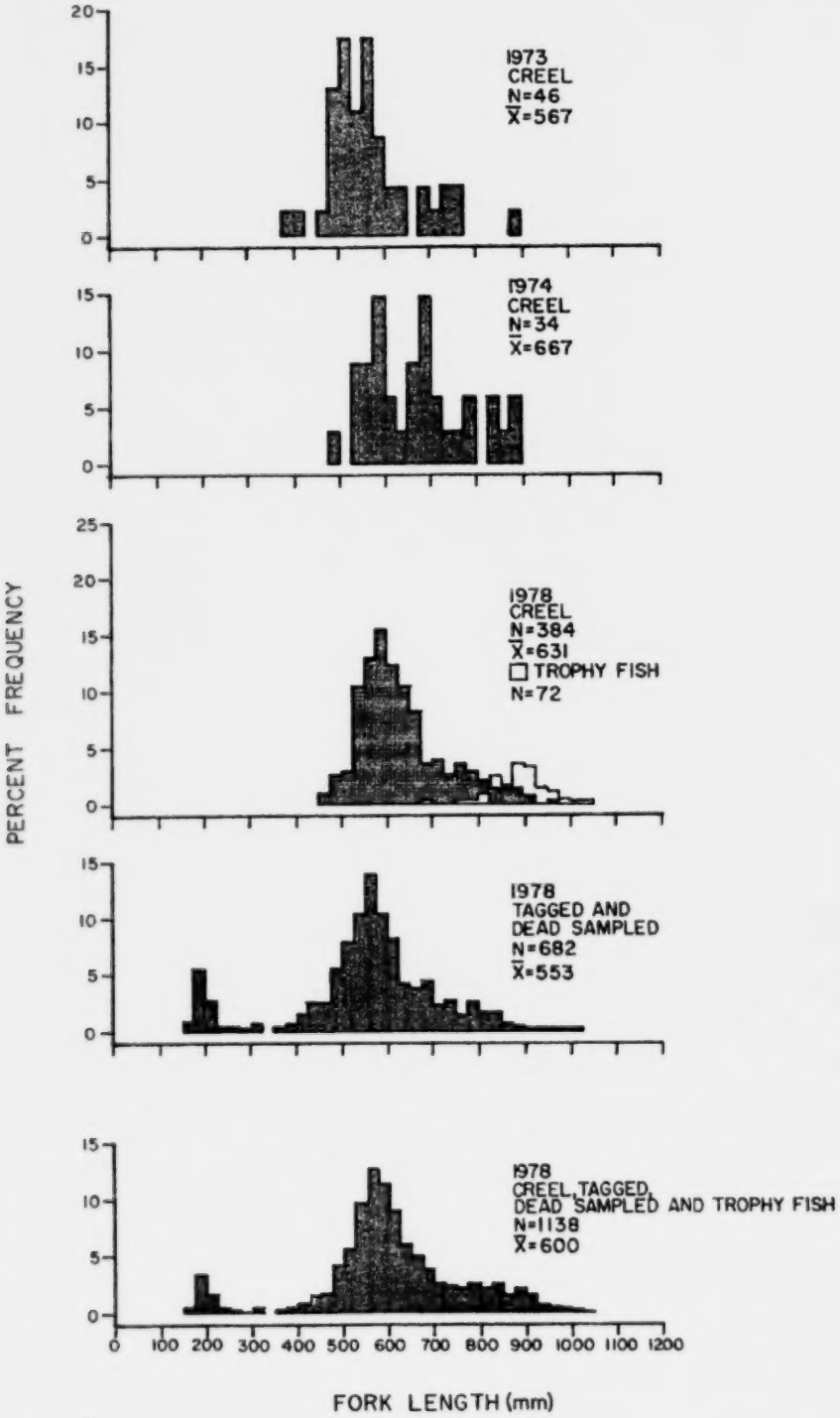

Fig. 9. Length-frequency distribution for lake trout from Arctic Star Lodge. Data for 1973 and 1974 from Falk et al. (1974c) and Moshenko and Gillman (1978b), respectively.

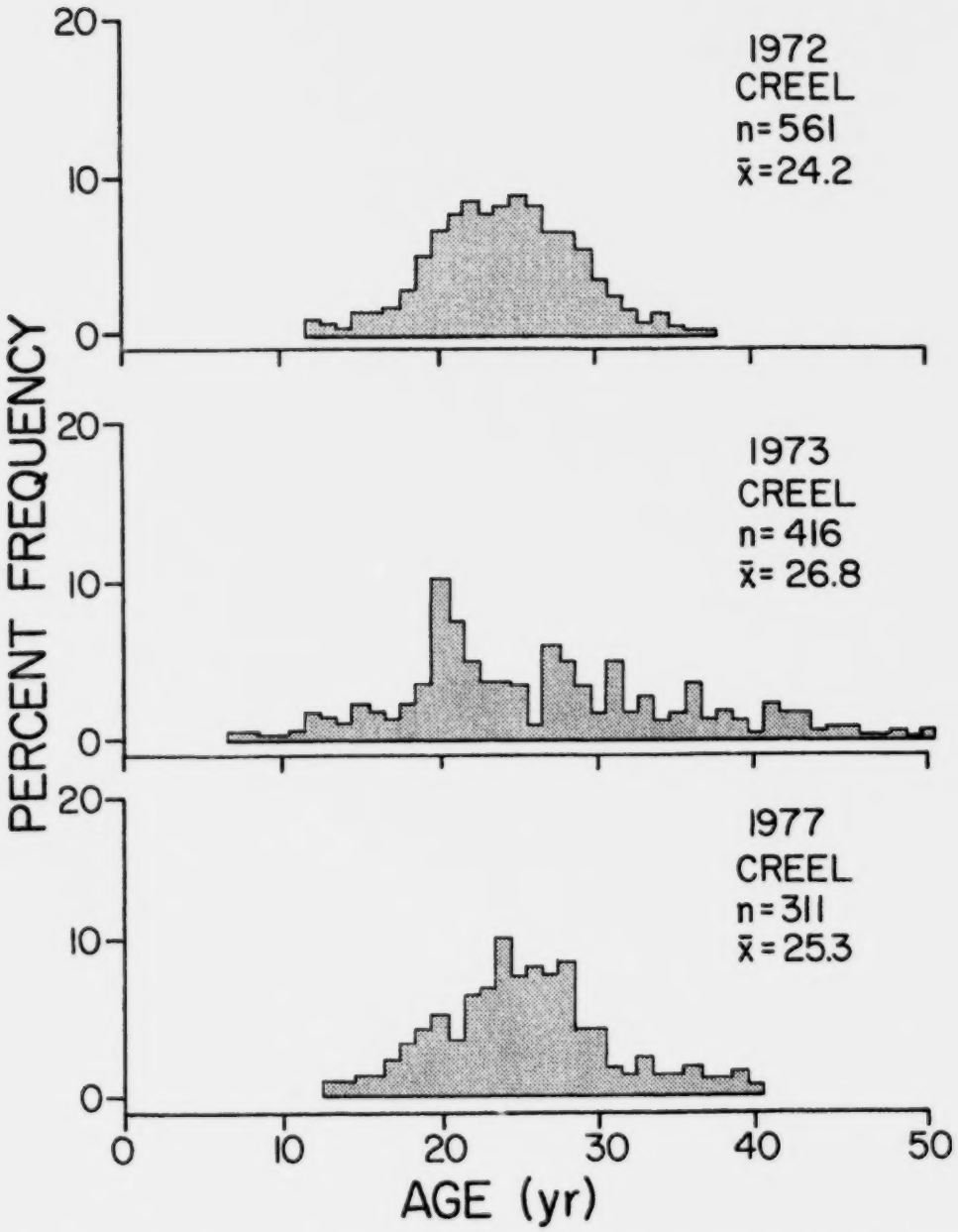

Fig. 10. Age-frequency distribution for lake trout from Plummer's Great Bear Lake Lodge. Data for 1972 and 1973 from Falk et al. (1973, 1974c).

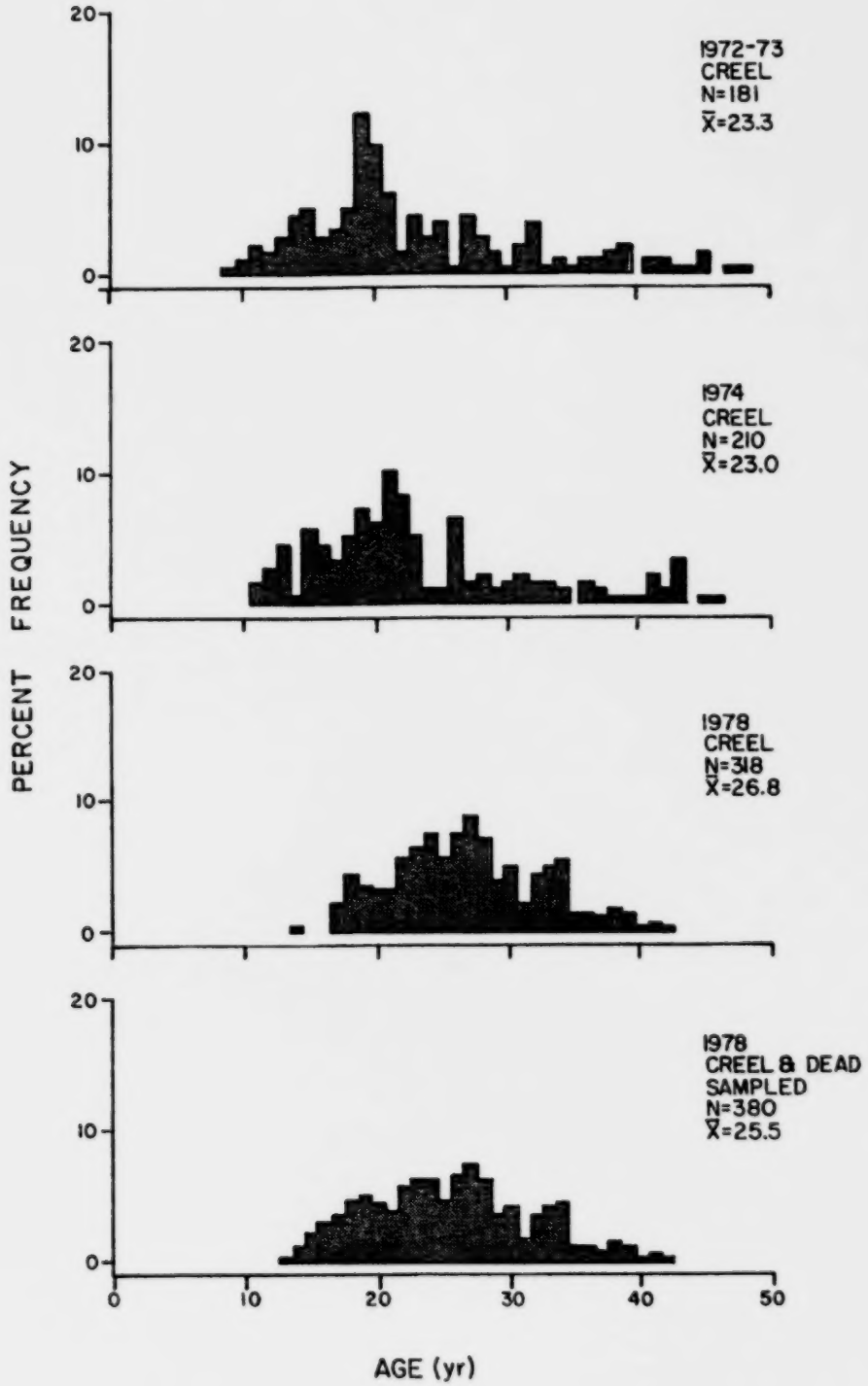

Fig. 11. Age-frequency distribution for lake trout from Branson's Lodge. Data for 1972-73 and 1974 from Falk et al. (1974c) and Moshenko and Gillman (1978b), respectively.

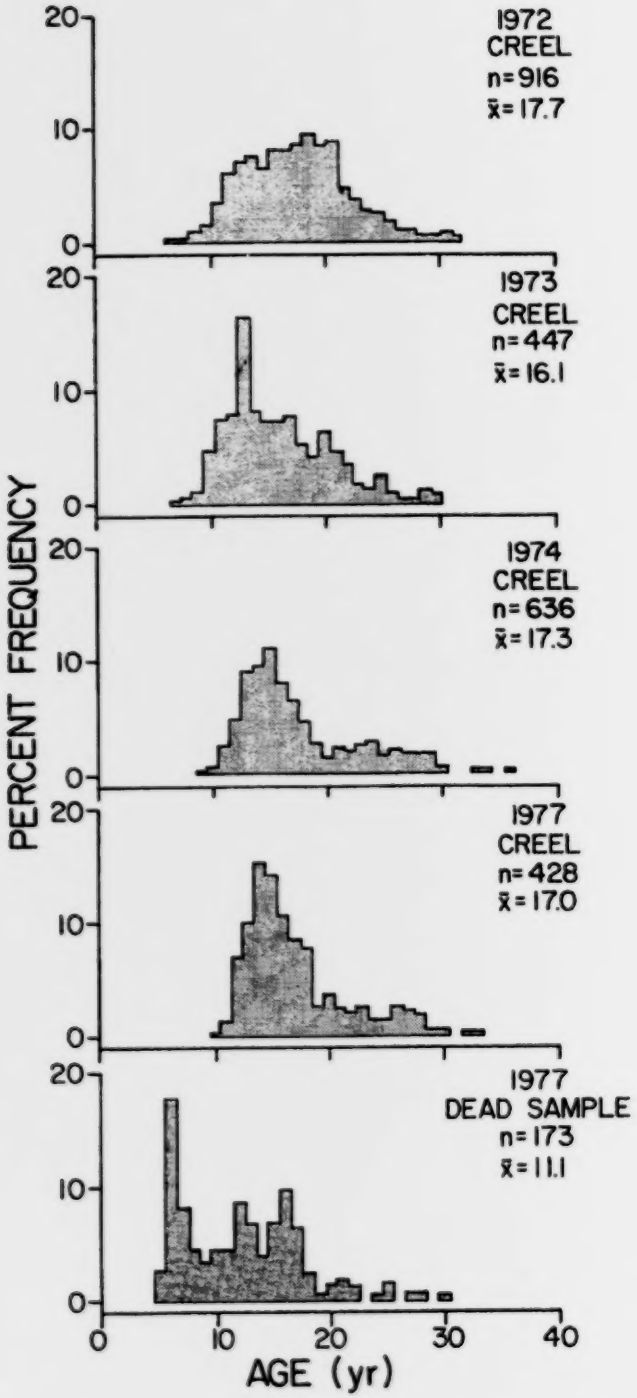

Fig. 12. Age-frequency distribution for lake trout from Plummer's Great Slave Lake Lodge. Data for 1972, 1973 and 1974 from Falk et al. (1973, 1974c) and Moshenko and Gillman (1978b), respectively.

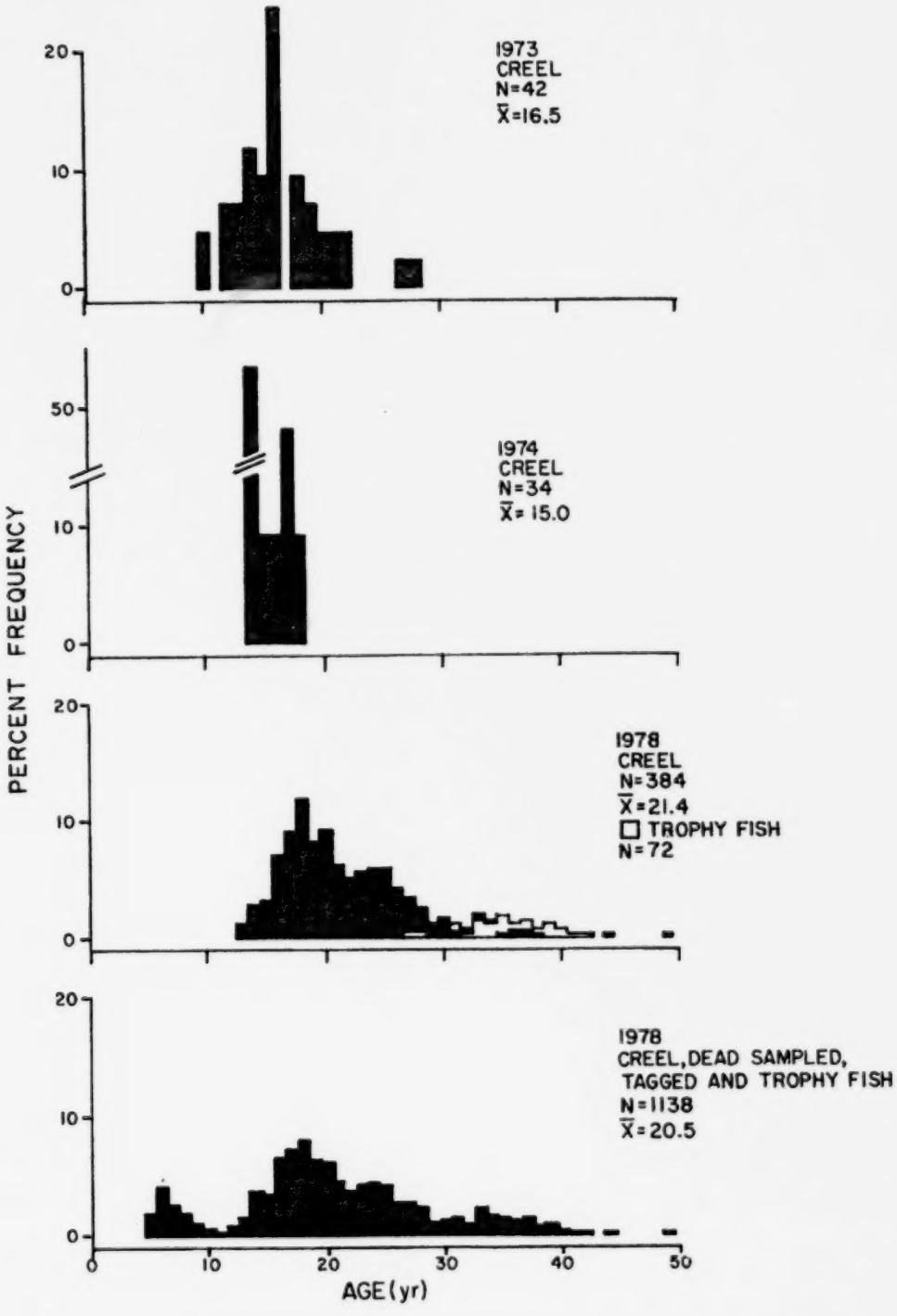

Fig. 13. Age-frequency distribution for lake trout from Arctic Star Lodge. Data for 1973 and 1974 from Falk et al. (1974c) and Moshenko and Gillman (1978b), respectively.

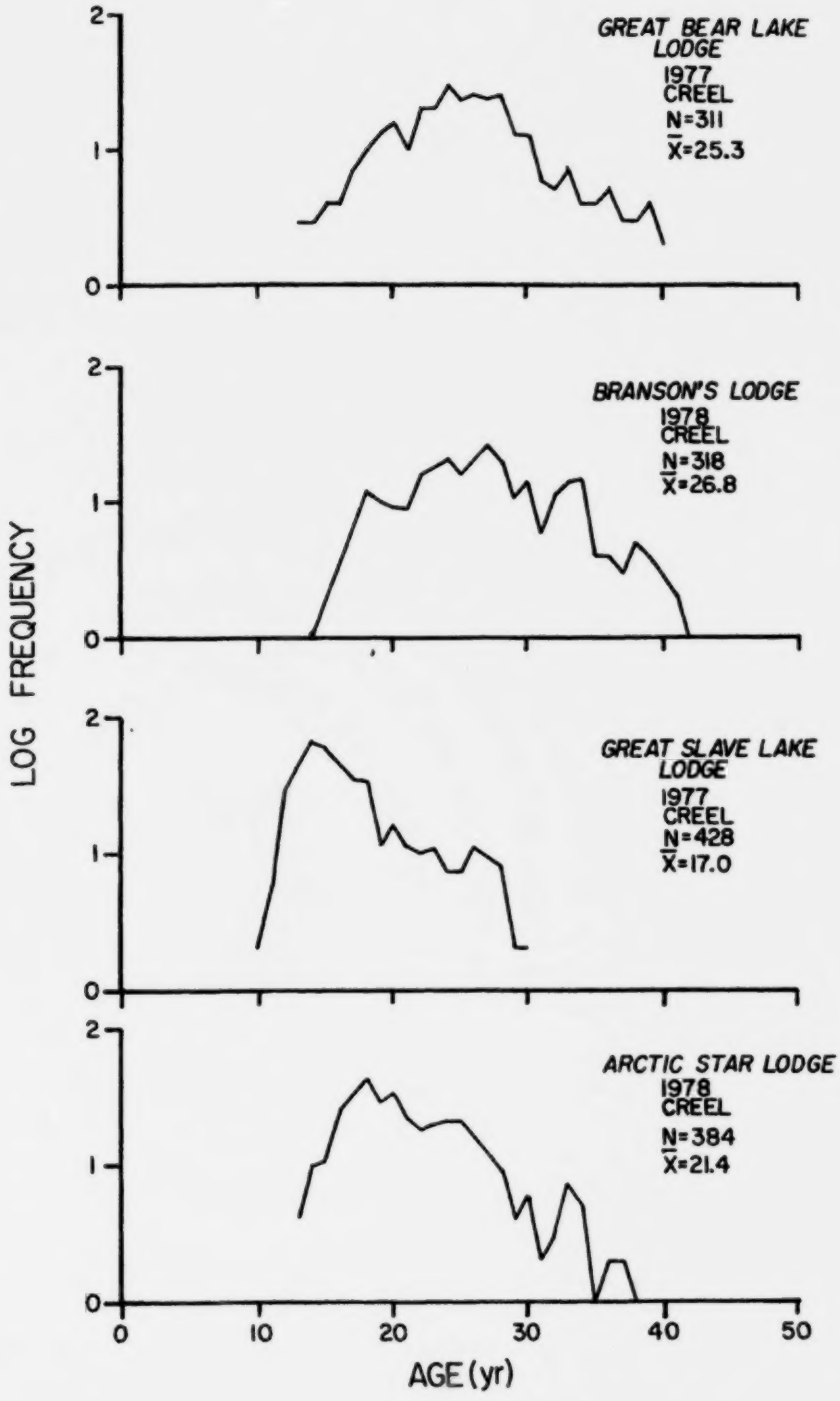

Fig. 14. Catch curves for lake trout from Great Bear Lake and Great Slave Lake lodges, 1977 and 1978.

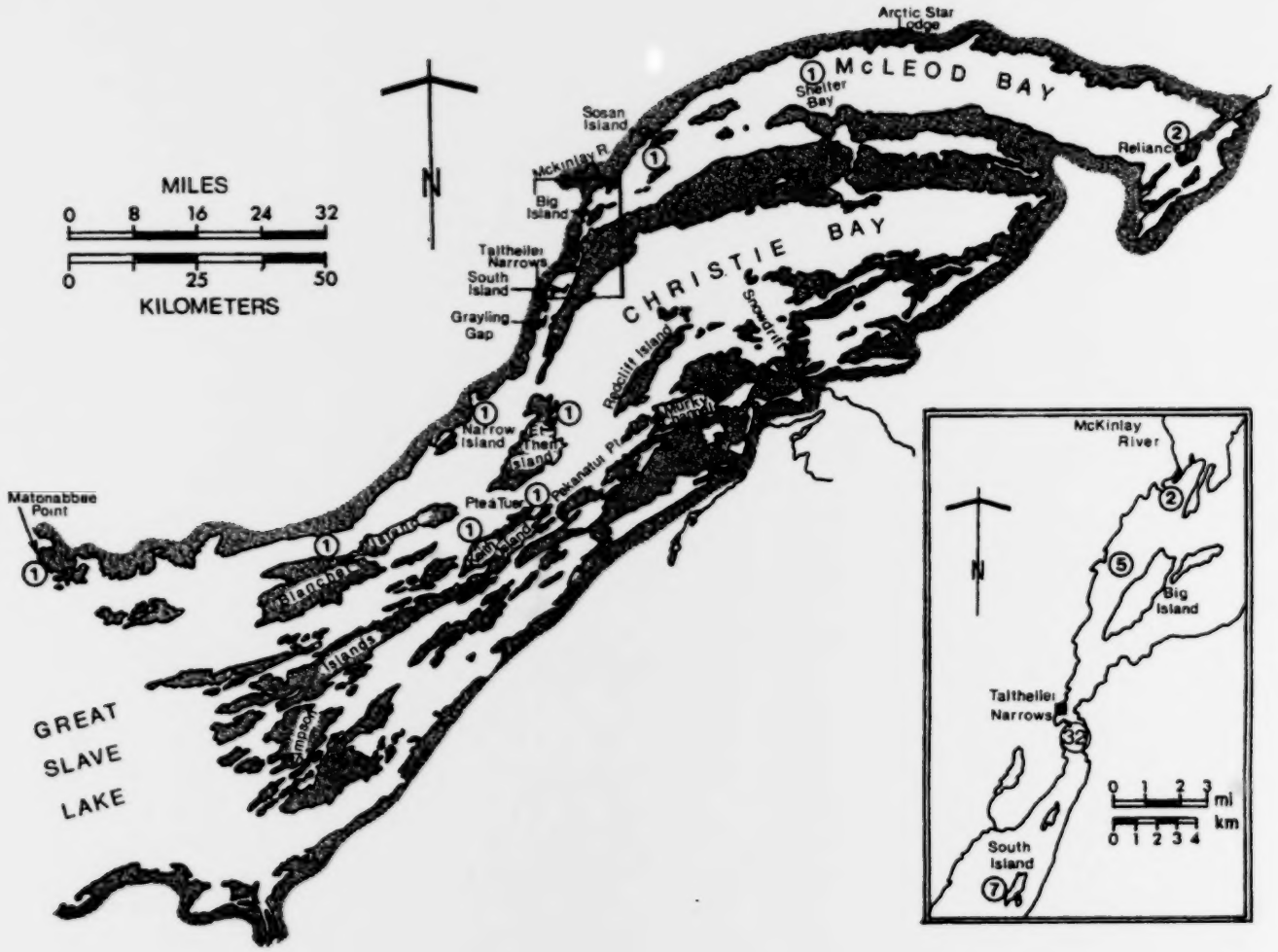

Fig. 15. Distribution of lake trout tag returns from fish tagged in the vicinity of Plummer's Great Slave Lake Lodge (Taltheilei Narrows), 1973-78.

Barbless Hooks Save Fish

Most mortalities among lure-caught fish occur when hooks are embedded in the gullet and gills, or when the gills are damaged from rough handling. Ensure that your fish is released properly by observing the following points:

1 Use Barbless Hooks

They facilitate easy removal of the hook and minimize damage. Barbs can be pinched down with pliers.

2 Use Small Mesh Landing Nets

Large mesh nets often tangle in the gill area of fish resulting in damage and heavy bleeding.

3 Keep Fish in Water as Much as Possible

Damage can occur when fish thrash about in the boat or on shore. Remove the hook quickly — but carefully.

Play it Like a True Sportsman

Release your fish back into the lake. Most fish, when handled properly and released do survive and may provide future fishing for someone else.

Learn How to Release Fish Properly

1 Keep Fish in Water

Exhausted fish may often be released without touching them, especially if barbless hooks are used. Bring fish alongside boat or shoreline and using needle-nosed pliers gently work the hook free.

2 If Fish Must be Handled

Avoid grasping by the eyes or gills. A firm grip across the top of the head or neck, or under the belly will hold most fish — don't squeeze too hard. Use a wet mitt — or at least a wet hand; otherwise the removal of the protective mucous coat may result in damage. Using needle-nosed pliers gently remove the hook rather than tearing it out.

3 Release the Fish Gently

Fish are sometimes passive and display loss of equilibrium when brought to the surface and removed from the water. This may be attributed to a change in water pressure and/or anoxia (insufficient oxygen), and subsequent increase of lactic acid in the bloodstream caused by severe exertion. If fish, when returned to the water, are sluggish and unable to right themselves, move them gently back and forth to force water over the gills.

Be a True Sportsman

Don't release fish that are damaged or bleeding heavily; retain them as part of your creel. Remember fish grow slowly in the cold and less productive waters of the Northwest Territories. For some larger fish it may take one-half or more of your generation to produce the fish you landed today. Practice conservation — Future generations may wish to fish here.

Appreciate the fishing and the northern landscape — leave nothing behind that may be hazardous to wildlife, and unattractive to the eye.

Government of Canada
Fisheries and Oceans

Gouvernement du Canada
Pêches et Océans

Fig. 16. Fish conservation poster for proper handling and release of angled fish.

Table 1. Summary of information pertaining to the operation of sport fishing lodges censused on Great Bear and Great Slave lakes, 1977 and 1978.

Lodge	Year	Guest Capacity[a]	No. of Guests		Period of Operation		
			Calculated	Licence Sales[b]	From	To	Days
GREAT BEAR LAKE							
Great Bear Lake Lodge (Plummer's)	1977	60	400	407	July 4	August 27	56
Branson's	1978	42	243	262	July 8	August 24	48
GREAT SLAVE LAKE							
Great Slave Lake Lodge (Plummer's)	1977	44	408	413	June 20	August 10	51
Arctic Star	1978	40	198	106[c]	June 30	August 31	63

[a] Figures obtained from the Division of Tourism, Government of the Northwest Territories.

[b] Figures obtained from the Wildlife Service, Government of the Northwest Territories.

[c] Does not include licence sales through other vendors.

Table 2. Summary of information pertaining to the creel census period at sport fishing lodges censused on Great Bear and Great Slave lakes, 1977 and 1978.

Lodge	Year	Period of Creel Census			%Season Censused	% Census Period Worked	No. of Angler Interviews
		From	To	Days			
GREAT BEAR LAKE							
Great Bear Lake Lodge (Plummer's)	1977	July 8	August 18	31	54	97	905
Branson's	1978	July 8	August 24	48	100	100	1252
GREAT SLAVE LAKE							
Great Slave Lake Lodge (Plummer's)	1977	June 20	August 10	51	98	100	1938
Arctic Star	1978	July 5	August 17	43	64	93	853

Table 3. Summary of information pertaining to the angler's creel from lodges censused on Great Bear and Great Slave lakes, 1977 and 1978.

Lodge	Year	Species	No. Caught	No. Released	Retained No.	Retained %	No. Sampled	Mean Wt. (kg)	Fish Retained Per Angler-day No.	Fish Retained Per Angler-day Wt. (kg)
GREAT BEAR LAKE										
Great Bear Lake Lodge (Plummer's)	1977	Lake trout	3000	1694	784	26.0	326	3.83	0.87	3.30
		Grayling	331	119	212	64.0	7	0.98	0.07	0.70
Branson's	1978	Lake trout	6790	5220	836	12.3	350	3.73	0.67	3.72
		Grayling	1194	792	382	32.0	0	-	0.31	-
		N. pike	346	269	77	22.3	0	-	0.06	-
GREAT SLAVE LAKE										
Great Slave Lake Lodge (Plummer's)	1977	Lake trout	6981	3700	2271	32.5	466	3.30	1.17	3.86
		Grayling	325	166	94	29.0	22	0.80	0.05	0.04
		N. pike	1006	807	124	12.0	0	-	0.07	-
Arctic Star	1978	Lake trout	2062	678	950	46.1	400	3.27	1.11	3.30
		Grayling	182	142	36	20.0	0	-	0.04	-
		N. pike	164	136	23	14.0	0	-	0.03	-

Table 4. Summary of information pertaining to the harvest of lake trout from lodges censused on Great Bear and Great Slave lakes, 1977 and 1978.

Lodge	Year	Lake Trout	Caught	Released	Retained	Release Mortality	Shore Lunch	Total Harvested	Harvest Per Angler
GREAT BEAR LAKE									
Great Bear Lake Lodge (Plummer's)	1977	No.	7051	3737	2294	494	1020	3413	8.4
		Wt.	23268	12323	7570	1630	3360	13072	32.2
Branson's	1978	No.	6790	5220	836	365	734	1935	8.0
		Wt.	25306	19455	3116	1360	2736	7212	29.8
GREAT SLAVE LAKE									
Great Slave Lake Lodge (Plummer's)	1977	No.	6751	3811	1762	473	1178	3808	9.4
		Wt.	25856	14596	6749	1812	4512	12566	31.0
Arctic Star	1978	No.	2825	928	1302	64	594	1960	9.9
		Wt.	9249	3038	4663	210	1975	6417	32.4

Table 5. Summary of information pertaining to the hours fished, angler success, and yield for lake trout from lodges censused on Great Bear and Great Slave lakes, 1977 and 1978.

Lodge	Year	Hours Fished (L. Trout)		Lake Trout Caught		Surface Area (hectares)		Yield (kg/hectare)	
		Total	Per Angler-day	Per Angler-day	Per Angler-hour	Available	Utilized	Area Available	Area Utilized
GREAT BEAR LAKE									
Great Bear Lake Lodge (Plummer's)	1977	5402	5.9	3.3	0.56	55989	32710	0.23	0.40
Branson's	1978	8138	6.5	5.4	0.83	22251	20919	0.32	0.35
GREAT SLAVE LAKE									
Great Slave Lake Lodge (Plummer's)	1977	13006	6.7	3.6	0.53	21822	4137	0.58	3.00
Arctic Star	1978	3899	4.6	2.4	0.53	11622	3782	0.55	1.91

Table 6. Summary of creel census data for four lodges on Great Bear and Great Slave lakes, 1971-78.

Lake/Lodge	Year	No. of Angler-guests[a]	Lake Trout: No. Caught Per Angler-hour	Lake Trout: No. Retained Per Angler-day	Total Harvest (Lake Trout): Per Angler No.	Per Angler Wt.(kg)	Season No.	Season Wt.(kg)
GREAT BEAR LAKE								
Great Bear Lake Lodge	1972	-	-	-	-	53.0	6828	24581
(Plummer's)	1973	413	0.74	2.17	-	43.9	5494	18781
	1977	407	0.56	0.87	8.4	32.2	3413	13072
Branson's Lodge	1971	-	-	-	-	46.3	3455	11885
	1972	-	-	-	-	43.7	3635	10217
	1973	180	0.75	2.38	-	56.6	3716	10293
	1974	359	0.93	2.08	-	49.8	3963	12890
	1978	262	0.83	0.67	8.0	29.8	1935	7212
GREAT SLAVE LAKE								
Great Slave Lake Lodge	1961	-	-	-	-	39.3	857	3690
(Plummer's)	1971	-	-	-	-	38.4	2569	12539
	1972	-	-	-	-	30.9	2966	9818
	1973	325	0.44	1.21	-	42.2	4112	13118
	1974	335	0.36	1.28	-	26.1	2373	8116
	1977	413	0.53	1.17	9.4	31.0	3808	12566
Arctic Star Lodge	1972	-	-	-	-	37.0	736	2959
	1973	74	0.63	3.18	-	64.4	911	2575
	1974	33[b]	0.32	0.93	-	36.3	349	1379
	1978	198[b]	0.53	1.11	9.9	32.4	1960	6417

[a] Based on licence sales.

[b] Calculated.

Table 7. Sport fishing licence sales from lodges on Great Bear and Great Slave lakes, 1977 and 1978.

	1977			1978		
	Resident[a]	Non-Resident	Total	Resident[a]	Non-Resident	Total
GREAT BEAR LAKE						
Great Bear Lake Trophy Lodge	95	226	321	87	242	329
Great Bear Lodge	8	305	313	35	226	261
Great Bear Lake Lodge (Plummer's)	43	364	407	98	327	425
Branson's Lodge	113	264	377	85	177	262
Arctic Circle Lodge	111	229	340	88	201	289
	370	1388	1758	393	1173	1566
GREAT SLAVE LAKE						
Great Slave Lake Lodge (Plummer's)	71	413	584	65	335	400
Frontier Fishing Lodge	52	212	264	48	171	219
Great Slave Trophy Lodge	17	34	51	9	22	31
Indian Mountain Lodge	37	14	51	N/A[b]	N/A[b]	N/A
Arctic Star Lodge	N/A	N/A	N/A	10[b]	96[b]	106
	177	673	850	132	624	756

[a] Resident of Canada; may not include some sales through other N.W.T. vendors.

[b] Does not include licence sales through other N.W.T. vendors.

Table 8. Harvest of lake trout from four sport fishing lodges on Great Bear and Great Slave lakes, 1971 to 1978.

Lodge	Year		Lake Trout Caught	Lake Trout Released	Lake Trout Retained	Release Mortality	Shore Lunches	Total	Harvest Per Angler
Great Bear Lake Lodge	1972	No.	10179	3603	5187	252	1389	6828	-
		Wt. (kg)	36645	12972	18673	908	5000	24581	53.0
	1973	No.	8959	3726	3994	261	1239	5494	-
		Wt.	30636	12747	13652	892	4237	18781	43.9
	1977	No.	6751	3811	1762	473	1178	3413	8.4
		Wt.	25856	14596	6749	1812	4512	13072	32.2
Branson's Lodge	1971	No.	6380	3145	2464	220	771	3455	-
		Wt.	21947	10819	8476	757	2652	11885	46.3
	1972	No.	6622	3212	2708	255	702	3635	-
		Wt.	18611	9026	7612	632	1973	10217	43.7
	1973	No.	6188	2658	2975	186	555	3716	-
		Wt.	17141	7363	8241	515	1537	10293	56.6
	1974	No.	13311	10052	2182	704	1077	3963	-
		Wt.	43309	32709	7100	2290	3500	12890	49.8
	1978	No.	6790	5220	836	365	734	1935	8.0
		Wt.	25306	19455	3116	1360	2736	7212	29.8
Great Slave Lake Lodge	1961[a]	No.	2345	1600	211	112	534	857	-
		Wt.	12544	9520	1256	666	1768	3690	39.3
	1971	No.	4371	1937	1578	135	856	2569	-
		Wt.	23026	11273	9184	786	2569	12539	38.4
	1972	No.	4936	2118	2035	148	783	2966	-
		Wt.	16338	7010	6736	490	2592	9818	30.3
	1973	No.	8632	4860	2841	340	931	4112	-
		Wt.	27536	15503	9063	1085	2970	13118	42.2
	1974	No.	4564	2345	1356	164	853	2373	-
		Wt.	15575	8020	4638	561	2917	8116	26.1
	1977	No.	7051	3737	2294	494	1020	3808	9.4
		Wt.	23268	12332	7570	1630	3360	12566	31.0
Arctic Star Lodge	1972[b]	No.	1320	628	557	44	736	-	-
		Wt.	5306	2524	2237	177	2958	-	-
	1973	No.	1214	374	640	71	911	-	-
		Wt.	3417	1039	1778	197	2575	64.4	-
	1974	No.	537	202	229	14	349	-	-
		Wt.	2122	798	905	55	1379	36.3	-
	1978	No.	2825	928	1302	64	594	1960	9.9
		Wt.	9249	3038	4663	210	1975	6417	32.4

[a] Estimate based on data from Keleher and Meeker (1962).

[b] Based on an estimate of 80 guests.

Table 9. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel sampled lake trout from Plummer's Great Bear Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. Sex Unknown
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
450-474	1	472	-	1500	-	1.43	1	0	-	-	-	-
475-499	4	482	4.0	1412	154.8	1.25	1	0	3	0	3.0	-
500-524	1	523	-	1800	-	1.26	1	0	-	-	-	-
525-549	5	538	8.5	1770	83.7	1.14	2	0	3	0	1.5	-
550-574	17	566	7.5	2332	467.0	1.28	8	62	9	22	1.1	-
575-599	21	587	5.8	2755	330.5	1.36	9	33	12	33	1.3	-
600-624	49	612	7.3	3008	468.7	1.31	23	70	25	28	1.1	1
625-649	48	637	7.5	3276	322.5	1.27	19	89	29	55	1.5	-
650-674	50	660	8.3	3667	458.3	1.27	20	90	30	70	1.5	-
675-699	30	686	7.0	3778	292.9	1.17	10	90	20	35	2.0	-
700-724	29	710	7.9	4324	505.9	1.21	8	75	21	38	2.6	-
725-749	24	734	7.2	4325	536.1	1.09	11	54	13	23	1.2	-
750-774	11	764	6.5	4809	445.4	1.08	4	50	7	43	1.7	-
775-799	6	787	7.1	5233	744.7	1.07	1	100	5	20	5.0	-
800-824	9	809	8.5	5989	1006.5	1.13	4	75	5	20	1.2	-
825-849	4	835	7.1	7075	1547.8	1.22	1	100	3	33	3.0	-
850-874	4	859	7.6	6925	266.1	1.09	2	0	2	0	1.0	-
875-899	8	886	10.1	7819	1110.3	1.12	2	100	6	17	3.0	-
900-924	3	912	6.4	8017	875.1	1.05	2	100	1	0	0.5	-
925-949	-	-	-	-	-	-	-	-	-	-	-	-
950-974	2	961	16.3	10700	282.8	1.20	1	100	1	0	1.0	-
Total	326	-	-	-	-	-	130	71	195	39	1.5	1
Mean	-	671	84.8	3828	1442.2	1.23	-	-	-	-	-	-

Table 10. Data for trophy lake trout from Plummer's Great Bear Lake Lodge, 1976.[a]

Length Interval (mm)	No.	Fork Length (mm) Mean	SD	Weight (g) Mean	SD	Condition Factor	Age (yr)	No.	Fork Length (mm) Mean	SD	Weight (g) Mean	SD	Condition Factor
800-824	2	813	4.2	6925	1520.3	1.29	31	1	810	-	5850	-	1.10
825-849	-	-	-	-	-	-	32	1	816	-	8000	-	1.47
850-874	1	864	-	6950	-	1.08	33	2	889	35.3	7975	1449.5	1.13
875-899	-	-	-	-	-	-	34	1	972	-	7750	-	0.84
900-924	2	914	-	8600	565.7	1.13	35	1	914	-	8200	-	1.07
925-949	-	-	-	-	-	-	36	-	-	-	-	-	-
950-974	3	966	10.9	8633	900.4	0.96	37	-	-	-	-	-	-
975-999	-	-	-	-	-	-	38	1	953	-	8600	-	0.99
1000-1024	-	-	-	-	-	-	39	1	1080	-	19100	-	1.52
1025-1049	-	-	-	-	-	-	40	-	-	-	-	-	-
1050-1074	-	-	-	-	-	-	41	1	1099	-	14000	-	1.05
1075-1099	3	1090	9.6	17100	2722.1	1.32	42	1	1092	-	18200	-	1.40
1100-1124	3	1112	6.8	13533	1501.1	0.98	43	1	1105	-	11800	-	0.87
1125-1149	-	-	-	-	-	-	44	2	1141	37.4	16700	3252.0	1.12
1150-1174	2	1168	-	17000	2828.4	1.07	45	1	1118	-	14400	-	1.03
1175-1199	-	-	-	-	-	-	46	1	1219	-	17000	-	0.94
1200-1224	1	1219	-	17000	-	0.94	47	1	1168	-	15000	-	0.94
1225-1249	1	1238	-	23400	-	1.23	48	-	-	-	-	-	-
							49	-	-	-	-	-	-
							50	1	1238	-	23400		1.23
Total	18	-	-	-	-	-	Total	17	-	-	-	-	-
Mean	-	1034	134.9	12788	5113.7	1.15	Mean	39.8[b]	1038	138.2	12979	5202.0	1.16

[a] Data obtained through Hawkins Taxidermists Ltd.

[b] Mean age.

Table 11. Mean fork length, mean weight and condition factor by length interval for all lake trout from Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
300-324	3	321	2.3	417	28.9	1.26
325-349	5	338	6.1	460	124.5	1.20
350-374	12	365	6.6	738	383.2	1.52
375-399	19	388	8.5	689	99.4	1.18
400-424	33	410	8.0	827	191.3	1.19
425-449	21	437	6.3	963	202.7	1.16
450-474	25	462	6.4	1228	271.9	1.24
475-499	22	485	6.6	1368	182.3	1.20
500-524	18	512	7.3	1633	363.8	1.22
525-549	29	535	6.8	1824	267.8	1.19
550-574	35	562	6.9	2284	304.8	1.29
575-599	37	588	6.4	2670	349.7	1.31
600-624	44	611	7.5	2905	407.2	1.27
625-649	50	636	7.2	3199	350.9	1.24
650-674	42	660	6.4	3589	646.1	1.25
675-699	45	684	6.6	3844	486.1	1.20
700-724	38	712	7.1	4270	557.7	1.18
725-749	26	737	6.5	4656	617.1	1.16
750-774	12	758	7.0	4936	335.8	1.13
775-799	17	784	6.4	5432	587.4	1.13
800-824	15	811	7.2	6353	1058.5	1.19
825-849	9	837	9.3	6767	585.8	1.15
850-874	10	862	6.8	7850	1042.2	1.22
875-899	5	886	8.2	8150	911.0	1.17
900-924	7	907	9.9	8328	1414.2	1.11
925-949	4	933	10.0	9638	1589.2	1.19
950-974	6	957	10.3	9838	749.3	1.12
975-999	5	983	8.2	10630	558.5	1.11
1000-1024	5	1008	9.1	11400	2478.7	1.11
1025-1049	4	1027	4.5	11625	750.0	1.07
1050-1074	1	1050	-	13900	-	1.20
1100-1124	2	1114	-	18100	-	1.31
1150-1174	2	1157	-	18850	-	1.22
1200-1224	1	1200	-	19500	-	1.13
Total	610	-	-	-	-	-
Mean	-	625	158.1	3504	2766.3	1.22

Table 12. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel sampled lake trout from Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature	
375-399	2	385	14.1	650	70.7	1.14	1	N/A	1	0	1.0
400-424	1	422	-	800	721.7	1.06	-		1	0	-
425-449	-	-	-	-	-	-	-		-	-	-
450-474	3	460		1417	721.7	1.43	1		2	0	2.0
475-499	12	487	7.1	1375	168.5	1.19	5		7	0	1.4
500-524	4	510	9.7	1575	357.1	1.19	1		3	0	3.0
525-549	8	535	6.3	1856	193.5	1.21	4		4	0	1.0
550-574	20	564	5.2	2327	336.2	1.30	11		9	11	0.8
575-599	22	589	5.8	2723	314.9	1.33	13		9	11	0.7
600-624	32	612	7.7	2966	404.9	1.29	19		13	31	0.7
625-649	42	636	7.2	3225	329.7	1.25	19		23	48	1.2
650-674	38	660	6.5	3667	596.2	1.27	17		21	0	1.2
675-699	38	686	6.5	3916	487.6	1.22	16		22	41	1.4
700-724	31	713	7.0	4305	556.4	1.19	8		23	57	2.9
725-749	21	736	5.9	4676	681.1	1.17	7		14	50	2.0
750-774	5	757	8.1	5090	307.0	1.17	2		3	0	1.5
775-799	12	785	7.4	5333	460.9	1.10	5		7	14	1.4
800-824	10	811	7.6	6290	1286.4	1.18	2		8	12	4.0
825-849	6	833	8.8	6650	632.5	1.15	2		4	50	2.0
850-874	3	858	9.2	6633	431.1	1.05	2		1	0	0.5
875-899	2	890	7.1	7725	176.8	1.10	-		2	50	-
900-924	1	922	-	8150	-	1.04	-		1	0	-
925-949	1	941	7.8	8775	318.2	1.06	-		1	0	-
950-974	1	970	-	9750	-	1.07	-		1	100	-
975-999	1	987	-	10050	-	1.05	1		-	-	-
1000-1024	1	1034	-	11400	-	1.03	-		1	100	-
Total	318	-	-	-	-	-	136		182	30	1.3
Mean	-	662	96.9	3727	1562.8	1.23	-		-	-	-

Table 13. Mean fork length, mean weight and condition factor by length interval for all lake trout from experimental nets at Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor
		Mean	SD	Mean	SD	
300-324	3	321	2.3	417	28.9	1.26
325-349	5	338	6.1	460	124.5	1.20
350-374	12	365	6.6	738	383.2	1.52
375-399	17	388	8.2	694	102.9	1.19
400-424	32	410	7.8	828	194.2	1.20
425-449	21	437	6.3	963	202.7	1.16
450-474	22	463	6.0	1202	170.8	1.21
475-499	11	483	5.6	1363	206.6	1.21
500-524	14	513	6.7	1650	377.2	1.22
525-549	21	535	7.2	1812	294.9	1.18
550-574	14	560	8.5	2225	266.6	1.27
575-599	15	586	6.8	2593	393.6	1.29
600-624	12	608	6.3	2742	382.5	1.22
625-649	8	638	7.9	3063	447.0	1.18
650-674	4	661	5.5	2850	717.6	0.98
675-699	7	678	3.4	3457	243.9	1.11
700-724	7	709	7.1	4114	579.3	1.16
725-749	5	741	7.7	4570	222.5	1.12
750-774	7	759	6.7	4829	330.7	1.11
775-799	5	782	2.0	5670	834.1	1.19
800-824	5	811	6.7	6480	410.2	1.21
825-849	2	843	3.5	6750	353.6	1.13
850-874	7	864	5.3	8371	714.1	1.30
900-924	4	908	9.6	8163	1718.2	1.09
925-949	1	925	-	12000	-	1.52
950-974	2	950	-	9450	1414.2	1.10
Total	263	-	-	-	-	-
Mean	-	541	149.2	2350	2122.3	1.22

Table 14. Mean fork length, mean weight and condition factor by length interval for trophy lake trout from Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
550-574	1	560	-	2250	-	1.28
825-849	1	849	-	7500	-	1.23
875-899	3	883	9.1	8433	1159.0	1.22
900-924	2	900	-	8700	1626.0	1.20
925-949	1	925	-	9000	-	1.14
950-974	3	957	11.5	10126	352.3	1.16
975-999	4	982	9.1	10775	525.2	1.14
1000-1024	5	1008	9.1	11400	2478.6	1.11
1025-1049	3	1025	-	11700	900.0	1.07
1050-1074	1	1050	-	13900	-	1.20
1100-1124	2	1114	1.4	18100	2687.0	1.31
1150-1175	2	1157	9.2	18850	2616.3	1.22
1200-1224	1	1200	-	19500	-	1.13
Total	29	-	-	-	-	-
Mean	-	982	119.8	11532	4099.8	1.17

Table 15. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for dead sampled lake trout from experimental nets at Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
325-349	1	329	-	450	-	1.26	1	N/A	-	N/A	-	-
350-374	3	365	4.4	550	86.6	1.13	2		-		-	1
375-399	6	392	7.9	650	104.9	1.07	4		2		0.5	-
400-424	6	410	8.8	792	49.2	1.15	2		4		2.0	-
425-449	9	437	5.5	878	93.9	1.05	4		5		1.2	-
450-474	8	463	7.6	1200	218.8	1.21	3		5		1.7	-
475-499	6	482	5.6	1258	156.3	1.13	2		4		2.0	-
500-524	2	521	0.7	1425	106.1	1.01	1		1		1.0	-
525-549	7	536	9.2	1586	167.6	1.03	1		6		6.0	-
550-574	6	562	9.6	2208	213.1	1.24	3		3		1.0	-
575-599	4	588	9.3	2125	95.7	1.05	3		1		3.0	-
600-624	1	612	-	2150	-	0.94	1		-		-	-
675-699	1	676	-	3050	-	0.99	-		1		-	-
700-724	1	710	-	3900	-	1.09	1		-		-	-
750-774	1	760	-	4900	-	1.12	-		1		-	-
Total	62	-	-	-	-	-	28	-	33	-	1.2	1
Mean	-	485	86.6	1379	816.1	1.11	-	-	-	-	-	-

Table 16. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel and dead sampled lake trout from experimental nets at Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. Sex Unknown
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
325-349	1	329	-	450	-	1.26	1	N/A	-	-	-	-
350-374	3	365	4.4	550	86.6	1.13	2		-	-	-	1
375-399	8	391	9.2	650	92.6	1.09	5		3	0	0.6	-
400-424	7	412	9.2	793	45.0	1.14	2		5	0	2.5	-
425-449	9	437	5.5	878	93.9	1.05	4		5	0	1.2	-
450-474	11	462	7.9	1259	384.6	1.27	4		7	0	1.8	-
475-499	18	485	6.9	1336	169.6	1.17	7		11	0	1.6	-
500-524	6	513	9.4	1525	291.1	1.13	2		4	0	2.0	-
525-549	15	535	7.5	1730	224.2	1.13	5		10	0	2.0	-
550-574	26	564	6.3	2300	312.4	1.28	14		12	8	0.9	-
575-599	26	589	6.2	2631	364.4	1.29	16		10	10	0.6	-
600-624	33	612	7.6	2941	423.1	1.28	20		13	31	0.7	-
625-649	42	636	7.2	3225	329.7	1.25	19		23	48	1.2	-
650-674	38	660	6.5	3667	596.2	1.27	17		21	43	1.2	-
675-699	39	685	6.6	3894	500.7	1.21	16		23	39	1.4	-
700-724	32	713	6.9	4292	552.0	1.18	9		23	57	2.6	-
725-749	21	736	5.9	4676	681.0	1.17	7		14	50	2.0	-
750-774	6	758	7.4	5058	285.3	1.16	2		4	0	2.0	-
775-799	12	785	7.4	5333	460.9	1.10	5		7	14	1.4	-
800-824	10	811	7.7	6290	1286.4	1.18	2		5	12	4.0	-
825-849	6	833	8.8	6650	632.5	1.15	2		4	50	2.0	-
850-874	3	858	9.2	6633	431.1	1.05	2		1	0	0.5	-
875-899	2	890	7.1	7725	176.8	1.10	-		2	50	-	-
900-924	1	922	-	8150	-	1.04	-		1	0	-	-
925-949	2	941	7.8	8775	318.2	1.06	-		2	0	-	-
950-974	1	970	-	9750	-	1.07	-		1	0	-	-
975-999	1	987	-	10050	-	1.05	1		-	-	-	-
1025-1049	1	1034	-	11400	-	1.03	-		1	0	-	-
Total	380	-	-	-	-	-	164	-	215	28	1.3	1
Mean	-	633	115.6	3344	1704.3	1.21	-	-	-	-	-	-

Table 17. Mean fork length, mean weight and condition factor by length interval for live sampled lake trout from experimental nets at Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
300-324	3	321	2.3	417	28.9	1.26
325-349	4	340	4.2	463	143.6	1.18
350-374	9	365	7.5	800	527.2	1.65
375-399	11	386	7.7	718	98.2	1.25
400-424	26	410	7.8	837	214.3	1.21
425-449	12	436	7.0	1027	240.6	1.24
450-474	14	463	5.1	1204	146.1	1.21
475-499	5	485	5.5	1513	188.7	1.32
500-524	12	512	6.4	1688	395.5	1.26
525-549	14	535	6.3	1925	281.3	1.26
550-574	8	558	7.7	2238	314.8	1.29
575-599	11	585	6.1	2764	307.5	1.38
600-624	11	607	6.4	2796	350.3	1.25
625-649	8	638	7.9	3063	447.0	1.19
650-674	4	661	5.5	2850	717.6	0.99
675-699	6	679	3.5	3525	180.9	1.13
700-724	6	709	7.8	4150	626.1	1.17
725-749	5	741	7.7	4570	222.5	1.12
750-774	6	758	7.3	4817	362.9	1.10
775-799	5	789	2.0	5670	834.1	1.19
800-824	5	811	6.9	6480	410.2	1.21
825-849	2	843	3.5	6750	353.6	1.13
850-874	7	864	5.3	8371	714.1	1.30
900-924	4	908	9.6	8163	1718.2	1.09
925-949	1	925	-	12000	-	1.52
950-974	2	950	-	9450	1414.2	1.10
Total	201	-	-	-	-	-
Mean	-	558	159.9	2649	2305.5	1.21

Table 18. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel sampled and trophy lake trout from Branson's Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. of Trophies
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
375-399	2	385	14.1	650	70.7	1.14	1	N/A	1	0	1.0	-
400-424	1	422	-	800	-	1.06	-		1	0	-	-
450-474	3	460	10.0	1417	721.7	1.43	1		2	0	2.0	-
475-499	12	487	7.1	1375	168.5	1.19	5		7	0	1.4	-
500-524	4	510	9.7	1575	357.1	1.19	1		3	0	3.0	-
525-549	8	535	6.3	1856	193.5	1.21	4		4	0	1.0	-
550-574	21	564	5.2	2324	328.1	1.30	11		9	11	0.8	1
575-599	22	589	5.8	2723	315.0	1.33	13		9	11	0.7	-
600-624	32	612	7.7	2966	404.9	1.29	19		13	31	0.7	-
625-649	42	636	7.2	3225	329.7	1.25	19		23	48	1.2	-
650-674	38	660	6.5	3667	596.2	1.27	17		21	43	1.2	-
675-699	38	686	6.5	3916	487.6	1.22	16		22	41	1.4	-
700-724	31	713	7.0	4305	556.4	1.19	8		23	57	2.9	-
725-749	21	736	5.9	4676	681.1	1.17	7		14	50	2.0	-
750-774	5	757	8.1	5090	307.0	1.17	2		3	0	1.5	-
775-799	12	785	7.4	5333	460.9	1.10	5		7	14	1.4	-
800-824	10	811	7.7	6290	1286.4	1.18	2		8	12	4.0	-
825-849	7	835	10.0	6771	660.7	1.16	2		4	50	2.0	1
850-874	3	858	9.2	6633	431.1	1.05	2		1	0	0.5	-
875-899	5	886	8.2	8150	911.0	1.17	-		2	50	-	3
900-924	3	907	12.7	8550	1201.4	1.15	-		1	0	-	2
925-949	3	935	10.5	8850	259.8	1.08	-		2	0	-	1
950-974	4	960	11.5	10032	343.8	1.13	-		1	0	-	3
975-999	5	983	8.2	10630	558.6	1.12	1		-	-	-	4
1000-1024	5	1008	9.1	11400	2478.7	1.11	-		-	-	-	5
1025-1049	4	1027	4.5	11625	750.0	1.07	-		1	0	-	3
1050-1074	1	1050	-	13900	-	1.20	-		-	-	-	1
1100-1124	2	1114	1.4	18100	2687.0	1.31	-		-	-	-	2
1150-1174	2	1157	9.2	18850	2616.3	1.22	-		-	-	-	2
1200-1224	1	1200	-	19500	-	1.13	-		-	-	-	1
Total	347	-	-	-	-	-	136	-	182	33	1.3	29
Mean	-	688.6	132.9	4379.0	2877.0	1.22	-	-	-	-	-	-

Table 19. Mean fork length, mean weight and condition factor by length interval for all lake trout at Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
100-124	1	113	-	70	-	-
125-149	-	-	-	-	-	-
150-174	6	170	2.9	52	8.8	1.06
175-199	18	186	8.0	67	12.8	1.04
200-224	20	210	7.2	95	19.3	1.03
225-249	14	237	6.5	140	36.5	0.97
250-274	5	261	8.7	179	54.5	1.00
275-299	7	284	6.3	261	20.3	1.15
300-324	3	306	7.9	224	103.5	0.78
325-349	2	344	5.6	475	35.3	1.17
350-374	4	358	6.1	462	62.9	1.00
375-399	13	389	6.9	663	200.7	1.13
400-424	13	411	8.9	815	131.3	1.17
425-449	14	441	5.0	1057	156.7	1.23
450-474	25	463	5.8	1174	177.4	1.18
475-499	42	488	7.3	1426	214.5	1.23
500-524	58	512	7.2	1630	214.4	1.22
525-549	86	538	7.2	2019	319.7	1.28
550-574	107	561	7.2	2318	393.3	1.31
575-599	125	586	6.8	2638	355.3	1.31
600-624	100	612	7.4	3037	546.4	1.33
625-649	89	636	7.2	3328	548.1	1.29
650-674	76	662	7.3	3833	574.7	1.32
675-699	65	684	8.0	4237	514.9	1.32
700-724	61	710	6.7	4900	569.4	1.37
725-749	59	735	6.6	5337	678.9	1.34
750-774	35	761	7.2	5867	942.8	1.33
775-799	25	785	8.1	6460	759.1	1.34
800-824	21	812	8.6	7152	804.4	1.34
825-849	11	839	6.7	6982	825.6	1.18
850-874	14	865	5.9	8494	1285.1	1.31
875-899	8	885	7.2	8869	1403.8	1.28
900-924	11	913	6.7	9410	1427.6	1.23
925-949	8	939	4.7	11081	1929.6	1.34
950-974	7	966	8.7	10450	450.0	1.16
975-999	11	985	6.5	11504	1543.4	1.20
1000-1024	8	1014	6.0	13087	911.7	1.25
1025-1049	-	-	-	-	-	-
1050-1074	2	1066	-	10825	318.2	0.89
1075-1099	-	-	-	-	-	-
1100-1124	-	-	-	-	-	-
1125-1149	1	1143	-	15450	-	1.03
Total	1175	-	-	-	-	-
Mean	-	607	157.1	3471	2470.7	1.28

Table 20. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel sampled lake trout from Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
400-424	1	400	-	700	-	1.09	-	-	-	-	-	1
425-449	1	437	-	900	-	1.08	-	-	1	0	-	-
450-474	7	465	7.4	1050	152.7	1.04	5	0	2	0	0.4	-
475-499	16	488	7.5	1314	158.1	1.13	8	0	8	0	1.0	-
500-524	27	511	6.4	1552	176.8	1.16	14	7	13	8	0.9	-
525-549	37	538	7.3	1911	276.4	1.22	14	36	22	32	1.6	1
550-574	50	562	7.4	2241	293.6	1.26	27	22	22	27	0.8	1
575-599	55	586	6.9	2473	295.8	1.22	28	39	27	30	1.0	-
600-624	54	612	7.6	2880	368.7	1.26	28	25	26	35	0.9	-
625-649	46	637	7.7	3215	399.4	1.24	24	29	22	45	0.9	-
650-674	32	662	6.5	3797	433.8	1.30	18	50	14	43	0.8	-
675-699	28	685	9.1	4092	434.1	1.27	11	18	17	53	1.5	-
700-724	29	711	7.7	4855	501.8	1.35	14	64	15	40	1.1	-
725-749	28	737	7.2	5081	575.2	1.27	14	57	14	36	1.0	-
750-774	11	763	8.7	5732	581.9	1.29	4	50	7	71	1.8	-
775-799	10	787	9.2	6220	499.0	1.27	4	100	6	83	1.5	-
800-824	10	812	9.1	6800	392.3	1.27	8	100	2	100	0.3	-
825-849	6	837	5.6	6767	535.4	1.16	4	100	2	100	0.5	-
850-874	4	865	8.6	7900	648.1	1.22	2	100	2	100	1.0	-
875-899	-	-	-	-	-	-	-	-	-	-	-	-
900-924	2	907	10.6	7950	70.7	1.06	1	100	1	0	1.0	-
Total	454	-	-	-	-	-	228	35	223	37	1.0	3
Mean	-	627	90.4	3292	1551.0	1.25	-	-	-	-	-	-

Table 21. Mean fork length, mean weight and condition factor by length interval for live and dead sampled lake trout from experimental nets at Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
150-174	6	170	2.9	52	8.8	1.06
175-199	18	186	8.0	67	12.8	1.04
200-224	20	210	7.2	95	19.3	1.03
225-249	14	237	6.5	139	36.5	0.97
250-274	5	261	8.7	179	54.6	0.99
275-299	7	284	6.3	261	20.3	1.15
300-324	3	306	7.9	224	103.5	0.78
325-349	2	344	5.6	475	35.3	1.17
350-374	4	358	6.1	462	63.9	1.00
375-399	13	389	6.9	663	200.7	1.13
400-424	12	412	8.6	825	132.3	1.18
425-449	13	442	5.0	1069	156.2	1.24
450-474	18	463	5.2	1222	165.6	1.23
475-499	26	488	7.4	1495	217.9	1.29
500-524	31	512	7.9	1698	223.4	1.27
525-549	49	538	7.1	2101	328.4	1.32
550-574	57	563	7.2	2386	455.4	1.35
575-599	70	586	6.8	2767	345.9	1.37
600-624	46	611	7.1	3222	657.5	1.41
625-649	43	636	6.6	3449	655.4	1.34
650-674	44	661	7.9	3859	662.3	1.33
675-699	37	683	7.1	4347	548.9	1.36
700-724	32	710	5.7	4940	629.7	1.38
725-749	31	734	5.7	5567	690.9	1.41
750-774	24	761	6.5	5929	1074.3	1.35
775-799	15	783	7.0	6620	871.3	1.38
800-824	9	810	8.4	7711	770.9	1.45
825-849	5	842	7.5	7240	1092.2	1.21
850-874	10	865	5.0	8732	1423.2	1.35
875-899	7	885	7.7	8878	1515.9	1.28
900-924	2	921	1.4	11730	1880.9	1.50
925-949	3	941	6.0	10267	642.9	1.23
950-974	-	-	-	-	-	-
975-999	2	991	8.5	12200	2545.6	1.26
Total	678	-	-	-	-	-
Mean	-	572	166.0	3127	2253.1	1.30

Table 22. Mean fork length, mean weight and condition factor by length interval for trophy lake trout from Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
800-824	2	820	-	6400	1272.8	1.16
825-849	-	-	-	-	-	-
850-874	-	-	-	-	-	-
875-899	1	883	-	8800	-	1.28
900-924	7	912	4.8	9164	481.1	1.21
925-949	5	938	4.5	11570	2348.0	1.40
950-974	7	966	8.7	10450	450.0	1.16
975-999	9	983	5.6	11350	1421.3	1.19
1000-1024	-	-	-	-	-	-
1025-1049	8	1014	5.9	13087	911.7	1.25
1050-1074	2	1066	-	10825	318.2	0.89
1075-1099	-	-	-	-	-	-
1100-1124	-	-	-	-	-	-
1125-1149	1	1143	-	15450	-	1.03
Total	42	-	-	-	-	-
Mean	-	967	60.0	10969	2087	1.21

Table 23. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for dead sampled lake trout from experimental nets at Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. Sex Unknown
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
100-124	1	113	-	70	-	-	-	-	-	-	-	1
125-149	-	-	-	-	-	-	-	-	-	-	-	-
150-174	6	170	2.9	52	8.8	1.06	-	-	1	0	-	5
175-199	17	185	7.9	65	10.1	1.02	-	-	-	-	-	17
200-224	18	210	7.3	92	17.3	0.99	1	0	1	0	1.0	16
225-249	11	236	6.0	127	16.9	0.96	2	0	3	0	1.5	6
250-274	5	261	8.8	179	54.6	1.00	1	0	-	-	-	4
275-299	6	284	6.6	255	12.2	1.11	-	-	2	0	-	4
300-324	3	306	7.9	224	103.5	0.78	-	-	1	0	-	2
325-349	1	348	-	450	-	1.07	1	0	-	-	-	-
350-374	3	360	5.5	467	76.4	0.99	1	0	2	0	2.0	-
375-399	6	391	9.2	571	148.7	0.95	2	0	4	0	2.0	-
400-424	8	410	7.5	775	119.5	1.12	3	33	4	0	1.3	1
425-449	5	446	3.2	1010	143.2	1.13	1	0	4	25	4.0	-
450-474	7	463	6.2	1193	127.2	1.20	5	0	2	0	0.4	-
475-499	7	485	7.7	1418	324.9	1.25	4	0	3	33	0.7	-
500-524	13	511	8.7	1638	202.2	1.27	1	0	12	17	12.0	-
525-549	5	539	8.9	2150	165.8	1.38	2	50	3	100	1.5	-
550-574	6	557	7.4	2250	314.6	1.30	1	100	5	20	5.0	-
575-599	15	585	8.0	2663	342.0	1.33	5	40	10	60	2.0	-
600-624	11	608	6.1	3036	644.2	1.35	2	100	9	22	4.5	-
625-649	5	638	4.1	3460	501.7	1.33	2	100	3	67	1.5	-
650-674	5	662	11.8	3870	420.7	1.33	4	50	1	0	0.2	-
675-699	2	679	4.9	4800	282.8	1.53	1	100	1	0	1.0	-
700-724	1	709	-	4950	-	1.39	-	-	1	0	-	-
725-749	3	734	10.9	5650	507.4	1.42	-	-	3	100	-	-
750-774	3	763	7.6	5967	814.4	1.35	1	100	2	50	2.0	-
775-799	1	776	-	6500	-	1.39	-	-	1	100	-	-
800-824	2	807	9.2	7225	318.2	1.37	-	-	2	100	-	-
825-849	-	-	-	-	-	-	-	-	-	-	-	-
850-874	-	-	-	-	-	-	-	-	-	-	-	-
875-899	1	889	-	11200	1.59	-	1	100	-	-	-	-
Total	177	-	-	-	-	-	41	34	80	31	1.9	56
Mean	-	424	185.4	1579	1822.0	1.18	-	-	-	-	-	-

Table 24. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel and dead sampled lake trout from experimental nets at Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. Sex Unknown
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
100-124	1	113	-	70	-	-	-	-	-	-	-	1
125-149	-	-	-	-	-	-	-	-	-	-	-	-
150-174	6	170	2.9	52	8.8	1.06	-	-	1	0	-	5
175-199	17	185	7.9	65	10.1	1.02	-	-	1	0	-	17
200-224	18	210	7.3	92	17.3	0.99	1	0	-	-	-	16
225-249	11	237	5.9	127	16.9	0.96	2	0	3	0	1.5	6
250-274	5	261	8.7	179	54.6	0.99	1	0	-	-	-	4
275-299	6	284	6.6	255	12.2	1.11	-	-	2	0	-	4
300-324	3	306	7.9	224	103.5	0.78	-	-	1	0	-	2
325-349	1	348	-	450	-	1.07	1	0	-	-	-	-
350-374	3	360	5.5	467	76.4	0.99	1	0	2	0	2.0	-
375-399	6	391	9.2	570	148.7	0.95	2	0	4	0	2.0	-
400-424	9	409	7.7	767	114.5	1.12	3	33	4	0	1.3	2
425-449	6	445	4.8	992	135.7	1.12	1	0	5	20	5.0	-
450-474	14	464	6.6	1121	154.1	1.12	10	0	4	0	0.4	-
475-499	23	487	7.5	1345	219.6	1.17	12	0	11	9	0.9	-
500-524	40	511	7.1	1580	187.3	1.18	15	7	25	12	1.7	-
525-549	42	538	7.4	1939	275.5	1.24	16	6	25	40	1.6	1
550-574	56	561	7.4	2242	292.9	1.27	28	21	27	26	1.0	1
575-599	70	586	7.1	2514	313.7	1.25	33	24	37	38	1.1	-
600-624	65	611	7.5	2906	425.3	1.27	30	43	35	31	1.2	-
625-649	51	637	7.4	3239	411.2	1.25	26	35	25	48	1.0	-
650-674	37	662	7.2	3806	427.1	1.31	22	50	15	40	0.7	-
675-699	30	685	8.9	4139	458.8	1.29	12	25	18	50	1.5	-
700-724	30	711	7.6	4858	493.4	1.35	14	64	16	38	1.1	-
725-749	31	736	7.4	5136	586.6	1.28	14	57	17	47	1.2	-
750-774	14	763	8.2	5782	610.4	1.30	5	60	9	67	1.8	-
775-799	11	786	9.4	6245	480.9	1.28	4	100	7	86	1.8	-
800-824	12	811	8.8	6871	403.1	1.29	8	100	4	100	0.5	-
825-849	6	837	5.6	6767	535.4	1.16	4	100	2	100	0.5	-
850-874	4	865	8.6	7900	648.1	1.22	2	100	2	100	1.0	-
875-899	1	889	-	11200	-	1.59	1	100	-	-	-	-
900-924	2	907	10.6	7950	70.7	1.06	1	100	1	0	1.0	-
Total	631	-	-	-	-	-	269	35	303	36	1.1	59
Mean	-	570	154.3	2811	1802.8	1.23	-	-	-	-	-	-

Table 25. Mean fork length, mean weight and condition factor by length interval for live sampled lake trout from experimental nets at Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm) Mean	SD	Weight (g) Mean	SD	Condition Factor
175-199	1	195	-	100	-	1.35
200-224	2	208	8.5	125	-	1.40
225-249	4	238	8.6	187	55.1	0.99
250-274	-	-	-	-	-	-
275-299	1	280	-	300	-	1.37
300-324	-	-	-	-	-	-
325-349	1	340	-	500	-	1.27
350-374	1	352	-	450	-	1.03
375-399	7	387	4.2	743	214.9	1.28
400-424	4	417	9.9	925	104.1	1.29
425-449	8	439	3.6	1106	161.3	1.31
450-474	11	463	4.9	1241	189.5	1.25
475-499	19	489	7.0	1524	166.1	1.30
500-524	18	512	7.5	1742	233.4	1.29
525-549	45	538	7.0	2095	342.8	1.31
550-574	51	562	7.1	2403	468.9	1.35
575-599	55	586	6.5	2796	344.6	1.39
600-624	35	612	7.2	3280	659.9	1.43
625-649	38	636	6.9	3447	678.5	1.34
650-674	39	661	7.5	3859	691.2	1.33
675-699	35	683	7.2	4321	551.2	1.35
700-724	31	710	5.8	4940	640.1	1.38
725-749	28	734	5.2	5559	714.5	1.41
750-774	21	760	6.5	5924	1122.8	1.35
775-799	14	784	7.0	6628	903.5	1.38
800-824	7	810	8.9	7850	821.7	1.47
825-849	5	842	7.5	7240	1092.2	1.21
850-874	10	865	5.0	8732	1423.2	1.35
875-899	6	885	8.3	8492	1225.0	1.22
900-924	2	921	1.4	11730	1880.9	1.50
925-949	3	941	6.0	10266	642.9	1.23
950-974	-	-	-	-	-	-
975-999	2	991	8.5	12200	2545.6	1.26
Total	504	-	-	-	-	-
Mean	-	624	121.6	3673	2135.1	1.35

Table 26. Mean fork length, mean weight, condition factor, maturity and trophies by length interval for creel sampled and trophy lake trout from Plummer's Great Slave Lake Lodge, 1977.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	No. Trophies	No. Sex Unknown
400-424	1	400	-	700	-	1.09	-	-	-	-	-	1
425-449	1	437	-	900	-	1.08	-	-	1	0	-	-
450-474	7	465	7.4	1050	152.7	1.04	5	0	2	0	-	-
475-499	16	488	7.5	1314	158.1	1.13	8	0	8	0	-	-
500-524	27	511	6.4	1552	176.8	1.16	14	7	13	8	-	-
525-549	37	538	7.3	1911	276.4	1.22	14	36	22	32	-	1
550-574	50	562	7.4	2241	293.6	1.26	27	22	22	27	-	1
575-599	55	586	6.9	2473	295.8	1.22	28	39	27	30	-	-
600-624	54	612	7.6	2880	368.7	1.26	28	25	26	35	-	-
625-649	46	637	7.7	3215	399.4	1.24	24	29	22	45	-	-
650-674	32	662	6.5	3797	433.8	1.24	18	50	14	43	-	-
675-699	28	685	9.0	4092	434.1	1.27	11	18	17	53	-	-
700-724	29	711	7.7	4855	501.8	1.35	14	64	15	40	-	-
725-749	28	737	7.2	5081	575.2	1.27	14	57	14	36	-	-
750-774	11	763	8.7	5732	581.9	1.29	4	50	7	71	-	-
775-799	10	787	9.2	6220	498.9	1.27	4	100	6	83	-	-
800-824	12	813	8.8	6733	545.4	1.25	8	100	2	100	2	-
825-849	6	837	5.6	6767	535.4	1.16	4	100	2	100	-	-
850-874	4	865	8.6	7900	648.1	1.22	2	100	2	100	-	-
875-899	1	883	-	8800	-	1.28	-	-	-	-	1	-
900-924	9	911	5.9	8894	679.0	1.18	1	100	1	0	7	-
925-949	5	938	4.5	11570	2348.0	1.40	-	-	-	-	5	-
950-974	7	966	8.7	10450	450.0	1.16	-	-	-	-	7	-
975-999	9	983	5.6	11350	1421.3	1.19	-	-	-	-	9	-
1000-1024	8	1014	6.0	13087	911.7	1.25	-	-	-	-	8	-
1025-1049	-	-	-	-	-	-	-	-	-	-	-	-
1050-1074	2	1066	-	10825	318.2	0.89	-	-	-	-	2	-
1075-1099	-	-	-	-	-	-	-	-	-	-	-	-
1100-1124	-	-	-	-	-	-	-	-	-	-	-	-
1125-1149	1	1143	-	15450	-	1.03	-	-	-	-	1	-
Total	496	-	-	-	-	-	228	35	223	37	42	3
Mean	-	656	129.4	3942	2672.0	1.24	-	-	-	-	-	-

Table 27. Mean fork length, mean weight and condition factor for all lake trout at Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor
150-174	6	170	3.3	75	41.8	1.53
175-199	38	189	6.9	115	46.1	1.63
200-224	19	207	7.2	140	42.8	1.59
225-249	3	230	3.8	233	57.7	1.93
250-274	2	255	1.4	200	-	1.21
275-299	1	295	-	300	-	1.17
300-324	5	310	7.2	360	54.8	1.21
350-374	2	356	5.7	400	-	0.89
375-399	4	389	9.8	663	94.6	1.12
400-424	10	411	6.2	805	111.7	1.15
425-449	17	437	7.1	1012	183.3	1.21
450-474	21	464	6.9	1186	171.1	1.18
475-499	47	488	7.5	1386	187.3	1.19
500-524	64	512	7.5	1722	297.3	1.29
525-549	110	538	7.0	1975	318.9	1.27
550-574	145	562	7.4	2279	284.8	1.28
575-599	129	586	7.1	2526	270.0	1.26
600-624	102	612	7.2	2938	401.3	1.28
625-649	68	636	7.1	3193	391.4	1.24
650-674	57	661	7.7	3568	456.3	1.23
675-699	44	686	6.6	4125	607.4	1.28
700-724	30	711	6.6	4777	607.8	1.33
725-749	27	735	6.9	5115	511.2	1.29
750-774	24	761	7.7	5679	690.9	1.29
775-799	30	786	6.8	6103	842.2	1.26
800-824	24	809	8.7	7171	819.6	1.36
825-849	28	835	7.4	7950	1048.3	1.37
850-874	17	860	6.6	8535	1410.2	1.34
875-899	24	886	7.2	9038	1120.1	1.30
900-924	19	909	6.6	9579	986.3	1.28
925-949	8	931	5.3	11550	1945.7	1.43
950-974	7	958	8.7	11771	2348.6	1.34
975-999	3	981	6.6	13300	2364.3	1.41
1000-1024	2	1014	5.7	13400	848.5	1.28
1025-1049	1	1025	-	15000	-	1.39
Total	1138	-	-	-	-	-
Mean	-	600	157.8	3352	2541.5	1.29

Table 28. Mean fork length, mean weight, condition factor, maturtiy and sex ratio by length interval for creel sampled lake trout from Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
450-474	4	464	8.6	1225	206.2	1.22	2	50	2	0	1.0
475-499	10	489	7.1	1330	221.4	1.13	5	40	5	0	1.0
500-524	11	515	6.8	1645	206.7	1.20	6	50	5	40	0.8
525-549	40	539	6.2	1920	290.2	1.23	22	23	18	17	0.8
550-574	50	564	7.7	2260	269.2	1.26	20	40	30	43	1.5
575-599	59	586	7.1	2476	244.5	1.23	30	40	29	34	1.0
600-624	47	611	7.5	2841	353.1	1.24	22	36	25	28	1.1
625-649	40	635	7.3	3158	371.3	1.23	17	41	23	39	1.4
650-674	31	662	8.2	3652	460.3	1.26	12	25	19	37	1.6
675-699	14	686	7.8	3814	425.8	1.18	11	36	3	0	0.3
700-724	15	709	6.2	4527	452.7	1.27	6	83	9	56	1.5
725-749	10	735	8.2	4900	309.1	1.23	8	25	2	50	0.3
750-774	14	761	7.5	5443	405.2	1.24	6	83	8	50	1.3
775-799	11	786	6.3	5564	683.0	1.15	3	33	8	25	2.7
800-824	8	809	10.5	6500	822.9	1.23	3	33	5	80	1.7
825-849	5	836	6.5	7040	270.2	1.20	3	66	2	100	0.7
850-874	6	856	6.1	7217	381.7	1.15	4	75	2	0	0.5
875-899	5	887	8.4	8220	526.3	1.18	3	66	2	50	0.7
900-924	3	906	9.8	8233	986.6	1.11	1	100	2	100	2.0
925-949	-	-	-	-	-	-	-	-	-	-	-
950-974	1	972	-	8100	-	0.88	1	0	-	-	-
Total	384	-	-	-	-	-	185	39	199	36	1.1
Mean	-	631	94.1	3274	1579.4	1.23	-	-	-	-	-

Table 29. Mean fork length, mean weight and condition factor by length interval for all lake trout from experimental nets at Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor
		Mean	SD	Mean	SD	
150-174	6	171	3.3	75	41.8	1.53
175-199	38	189	6.9	115	46.1	1.63
200-224	19	207	7.2	139	42.8	1.59
225-249	3	230	3.8	233	57.7	1.93
225-274	2	255	1.4	200	-	1.21
275-300	1	295	-	300	-	1.17
300-324	5	310	7.2	360	54.8	1.21
350-374	2	356	5.7	400	-	0.89
375-399	4	389	9.8	663	94.6	1.12
400-424	10	411	6.2	805	111.7	1.16
425-449	17	437	7.1	1012	183.0	1.21
450-474	17	464	6.7	1176	167.8	1.17
475-499	37	488	7.7	1401	177.4	1.21
500-524	53	511	7.5	1738	312.1	1.30
525-549	70	537	7.3	2006	332.3	1.29
550-574	95	561	7.0	2289	279.6	1.30
575-599	70	586	7.2	2569	284.7	1.28
600-624	55	612	7.0	3022	423.7	1.32
625-649	28	637	6.9	3243	420.3	1.26
650-674	26	660	7.1	3468	439.4	1.21
675-699	29	686	5.9	4197	493.9	1.30
700-724	15	712	6.9	5027	652.9	1.39
725-749	17	734	6.2	5241	570.2	1.32
750-774	9	762	8.5	5833	721.1	1.32
775-799	18	787	7.3	6406	797.4	1.32
800-824	12	808	7.5	7542	574.4	1.43
825-849	12	832	6.7	8017	1276.9	1.39
850-874	4	859	6.2	9675	1656.1	1.53
875-899	3	877	3.5	9967	1750.2	1.48
900-924	1	900	-	10700	-	1.47
925-949	1	925	-	10500	-	1.33
950-974	1	953	-	10600	-	1.22
975-999	1	980	-	11600	-	1.23
1000-1024	1	1010	-	12800	-	1.24
Total	682	-	-	-	-	-
Mean	-	553	157.5	2722	2054.1	1.32

Table 30. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for trophy lake trout from Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature	
675-699	1	695	-	6400	-	1.91	1	100	-	-	-
700-724	-	-	-	-	-	-	-	-	-	-	-
725-749	-	-	-	-	-	-	-	-	-	-	-
750-774	1	754	-	7600	-	1.77	-	-	1	100	-
775-799	1	780	-	6600	-	1.39	1	0	-	-	-
800-824	4	809	10.4	7400	734.8	1.40	2	50	2	100	1.0
825-849	11	836	8.3	8291	772.6	1.42	6	100	5	100	0.8
850-879	7	863	6.0	9014	968.6	1.40	3	66	4	100	1.3
875-899	16	887	6.4	9119	1019.3	1.31	6	83	10	40	1.7
900-924	15	910	5.8	9773	770.4	1.30	4	75	11	64	2.8
925-949	7	932	5.1	11700	2051.0	1.45	4	100	3	66	0.8
950-974	5	956	7.2	12740	1840.7	1.46	2	100	3	66	1.5
975-999	2	982	9.2	14150	2616.3	1.50	-	-	2	100	-
1000-1024	1	1018	-	14000	-	1.33	-	-	1	100	-
1025-1049	1	1025	-	15000	-	1.40	1	100	-	-	-
Total	72	-	-	-	-	-	30	83	42	71	1.4
Mean	-	887	56.3	9721	2122.0	1.38	-	-	-	-	-

Table 31. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for dead sampled lake trout from experimental nets at Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. Sex Unknown
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
150-174	6	170	3.3	75	41.8	1.53	-	-	-	-	-	6
175-199	38	189	6.9	114	46.1	1.63	3	0	2	0	0.7	33
200-224	19	207	7.2	139	42.7	1.59	2	0	-	-	-	17
225-249	3	230	3.8	233	57.7	1.93	1	0	-	-	-	2
250-274	2	255	1.4	200	-	1.21	1	0	-	-	-	1
275-299	1	295	-	300	-	1.17	-	-	-	-	-	1
300-324	4	309	7.5	375	50.0	1.27	-	-	3	0	-	1
350-374	2	356	5.7	400	-	0.89	1	0	-	-	-	1
375-399	3	394	5.1	683	104.1	1.12	1	0	2	0	2.0	-
400-424	7	409	5.2	779	90.6	1.13	3	0	4	0	1.3	-
425-449	6	434	7.1	967	121.1	1.18	2	0	4	0	2.0	-
450-474	6	462	7.6	1133	121.1	1.15	1	0	5	0	5.0	-
475-499	11	490	6.7	1414	179.0	1.20	4	25	7	14	1.8	-
500-524	14	510	7.4	1636	206.1	1.24	8	0	6	17	0.8	-
525-549	8	537	8.6	1800	220.4	1.16	5	20	3	33	0.6	-
550-574	13	565	4.5	2292	239.7	1.27	10	30	3	66	0.3	-
575-599	8	588	7.7	2625	380.8	1.29	6	50	2	0	0.3	-
600-624	12	614	6.9	2967	257.0	1.28	2	0	10	40	5.0	-
625-649	4	642	8.3	3250	264.6	1.23	1	100	3	33	3.0	-
650-674	2	661	6.4	3550	495.0	1.23	-	-	2	50	-	-
675-699	3	686	2.0	4333	568.6	1.34	1	100	2	50	2.0	-
725-749	2	737	9.9	5450	70.7	1.36	1	100	1	0	1.0	-
750-774	1	755	-	6100	-	1.42	1	100	-	-	-	-
775-799	2	792	9.2	6100	989.9	1.23	-	-	2	100	-	-
Total	177	-	-	-	-	-	54	22	61	23	1.1	62
Mean	-	401	181.6	1322	1370.6	1.37	-	-	-	-	-	-

Table 32. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel sampled and dead sampled lake trout from experimental nets at Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor	Males		Females		F/M Ratio	No. Sex Unknown
		Mean	SD	Mean	SD		No.	%Mature	No.	%Mature		
150-174	6	170	3.3	75	41.8	1.53	-	-	-	-	-	6
175-199	38	189	6.9	114	46.1	1.63	3	0	2	0	0.7	33
200-224	19	207	7.2	139	42.7	1.59	2	0	-	-	-	17
225-249	3	230	3.8	233	57.7	1.93	1	0	-	-	-	2
250-274	2	255	1.4	200	-	1.21	1	0	-	-	-	1
275-299	1	295	-	300	-	1.17	-	-	-	-	-	1
300-324	4	309	7.5	375	50.0	1.27	-	-	3	0	-	1
325-349	-	-	-	-	-	-	-	-	-	-	-	1
350-374	2	356	5.7	400	-	0.89	1	0	-	-	-	-
375-399	3	394	5.1	683	104.0	1.12	1	0	2	0	2.0	-
400-424	7	409	5.2	779	90.6	1.13	3	0	4	0	1.3	-
425-449	6	434	7.1	967	121.1	1.18	2	0	4	0	2.0	-
450-474	10	462	7.6	1170	156.7	1.18	3	33	7	0	2.3	-
475-499	21	490	6.7	1374	199.8	1.17	9	33	12	8	1.3	-
500-524	25	512	7.4	1640	202.1	1.22	14	21	11	27	0.8	-
525-549	48	539	6.5	1900	281.4	1.22	27	22	21	19	0.8	-
550-574	63	564	7.2	2267	284.0	1.26	30	27	33	45	1.1	-
575-599	67	586	7.1	2494	265.1	1.24	36	42	31	31	0.9	-
600-624	59	612	7.5	2866	337.7	1.25	24	33	35	31	1.5	-
625-649	44	635	7.5	3166	361.5	1.23	18	44	26	38	1.4	-
650-674	33	662	8.0	3645	454.9	1.26	12	25	21	38	1.8	-
675-699	17	686	7.1	3906	478.9	1.21	12	42	5	20	0.4	-
700-724	15	709	6.2	4527	452.7	1.27	6	83	9	56	1.5	-
725-749	12	736	8.0	4992	352.8	1.26	9	33	3	33	0.3	-
750-774	15	760	7.3	5487	425.7	1.25	7	86	8	50	1.1	-
775-779	13	787	6.7	5646	714.9	1.16	3	33	10	40	3.3	-
800-824	8	809	10.5	6500	822.9	1.23	3	33	5	80	1.7	-
825-849	5	836	6.5	7040	270.2	1.20	3	67	2	100	0.7	-
850-874	6	856	6.2	7217	381.7	1.15	4	75	2	0	0.5	-
875-899	5	887	8.4	8220	526.3	1.19	3	67	2	50	0.7	-
900-924	3	906	9.8	8233	986.6	1.11	1	100	2	100	2.0	-
950-974	1	972	-	8100	-	0.88	1	0	-	-	-	-
Total	561	-	-	-	-	-	239	35	260	33	1.1	62
Mean	-	558	166.8	2661	1766.4	1.27	-	-	-	-	-	-

Table 33. Mean fork length, mean weight and condition factor by length interval for live sampled lake trout from experimental nets at Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm)		Weight (g)		Condition Factor
		Mean	SD	Mean	SD	
300-324	1	315	-	300	-	0.96
375-399	1	376	-	600	-	1.13
400-424	3	415	7.2	867	152.8	1.20
425-449	11	439	6.8	1036	211.1	1.22
450-474	11	465	6.1	1200	189.7	1.19
475-499	26	487	7.9	1396	179.9	1.21
500-524	39	511	7.5	1774	337.0	1.33
525-549	62	537	7.2	2032	336.2	1.31
550-574	82	560	7.1	2289	286.7	1.30
575-599	62	585	7.2	2561	273.0	1.28
600-624	43	611	6.9	3037	461.0	1.33
625-649	24	636	6.4	3242	445.2	1.26
650-674	24	660	7.3	3461	445.6	1.21
675-699	26	686	6.2	4181	494.8	1.30
700-724	15	712	6.9	5027	653.0	1.40
725-749	15	734	6.0	5213	603.4	1.32
750-774	8	763	8.6	5800	763.5	1.31
775-799	16	786	7.1	6444	800.1	1.33
800-824	12	808	7.5	7542	574.4	1.43
825-849	12	832	6.7	8016	1276.9	1.39
850-874	4	859	6.2	9675	1656.0	1.53
875-899	3	877	3.5	9967	1750.2	1.48
900-924	1	900	-	10700	-	1.47
925-949	1	925	-	10500	-	1.33
950-974	1	953	-	10600	-	1.22
975-1000	1	980	-	11600	-	1.23
1000-1024	1	1010	-	12800	-	1.24
Total	505	-	-	-	-	-
Mean	-	606	105.3	3210	2029.3	1.30

Table 34. Mean fork length, mean weight, condition factor, maturity and sex ratio by length interval for creel sampled and trophy lake trout from Arctic Star Lodge, 1978.

Length Interval (mm)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
450-474	4	464	8.6	1225	206.2	1.23	2	50	2	0	1.0
475-499	10	489	7.1	1330	221.4	1.13	5	40	5	0	1.0
500-524	11	515	6.8	1645	206.7	1.21	6	50	5	40	0.8
525-549	40	539	6.2	1920	290.2	1.23	22	23	18	17	0.8
550-574	50	564	7.7	2260	296.2	1.26	20	25	30	43	1.5
575-599	59	586	7.1	2476	244.5	1.23	30	40	29	34	1.0
600-624	47	611	7.5	2841	353.1	1.24	22	36	25	28	1.1
625-649	40	635	7.3	3158	371.3	1.23	17	41	23	39	1.4
650-674	31	662	8.2	3652	460.3	1.26	12	25	19	37	1.6
675-699	15	687	7.9	3987	783.6	1.23	12	42	3	0	0.3
700-724	15	709	6.2	4527	452.7	1.27	6	83	9	56	1.5
725-749	10	735	8.2	4900	309.1	1.23	8	25	2	50	0.3
750-774	15	760	7.4	5587	680.2	1.28	6	83	9	56	1.5
775-799	12	785	6.2	5650	716.7	1.17	4	25	8	25	2.0
800-824	12	809	10.0	6800	880.1	1.28	5	40	7	86	1.4
825-849	16	836	7.6	7900	880.9	1.35	9	89	7	100	0.8
850-874	13	860	6.9	8185	1183.1	1.29	7	71	6	67	0.9
875-899	21	887	6.7	8905	994.2	1.28	9	78	12	42	1.3
900-924	18	909	6.4	9517	975.7	1.27	5	80	13	69	2.6
925-949	7	932	5.1	11700	2051.0	1.45	4	100	3	67	0.8
950-974	6	959	9.2	11967	2509.7	1.36	3	67	3	67	1.0
975-999	2	982	9.2	14150	2616.3	1.50	-	-	2	100	-
1000-1024	1	1018	-	14000	-	1.33	-	-	1	100	-
1025-1049	1	1025	-	15000	-	1.39	1	100	-	-	-
Total	456	-	-	-	-	-	215	40	241	42	1.1
Mean	-	671	129.2	4292	2888.0	1.25	-	-	-	-	-

Table 35. Length-weight relationship summary, $\log_{10} W = a + b (\log_{10} L)$, for lake trout from four sport fishing lodges located on Great Bear and Great Slave lakes, 1973 to 1978.

Lodge	Year	Number	Y-intercept (a)	Slope (b)	SD of b (S_b)	95% C.I. of b
Great Bear Lake Lodge (Plummer's)						
Creel	1973	500	-4.1333	2.7200	0.0647	2.5930-2.8470
Creel	1977	326	-3.7286	2.5801	0.0613	2.4600-2.7002
Branson's Lodge						
Creel	1973	280	-4.3679	2.7880	0.1217	2.5510-3.0250
Creel	1974	210	-4.2884	2.7751	0.0678	2.6422-2.9080
Creel	1978	318	-4.2996	2.7816	0.0524	2.6789-2.8843
Trophies	1978	29	-4.6220	2.8954	0.1592	2.5694-3.2214
Trophies & Creel	1978	347	-4.4169	2.8236	0.3990	2.7453-2.9019
Live Sampled	1978	201	-4.5393	2.8636	0.0511	2.7634-2.9638
Dead Sampled	1978	62	-4.7423	2.9196	0.0957	2.7282-3.1110
Live & Dead Sampled	1978	263	-4.6673	2.9061	0.0455	2.8169-2.9953
Combined[a]	1978	609	-4.6958	2.9198	0.0261	2.8686-2.9710
Great Slave Lake Lodge (Plummer's)						
Creel	1973	472	-5.4529	3.1950	0.0529	3.0950-3.2950
Creel	1974	616	-6.0787	3.4061	0.0377	3.3322-3.4800
Creel	1977	454	-5.4472	3.1932	0.0395	3.1158-3.2706
Trophies	1977	42	-3.4080	2.4929	0.3123	1.8639-3.1219
Trophies & Creel	1977	496	-5.1028	3.0690	0.0299	3.0104-3.1276
Live Sampled	1977	502	-4.9961	3.0438	0.0327	2.9797-3.1079
Dead Sampled	1977	177	-5.4804	3.2095	0.0337	3.1434-3.2756
Live & Dead Sampled	1977	679	-5.4492	3.2042	0.0501	3.1060-3.3024
Combined[a]	1977	1175	-5.3227	3.1534	0.0147	3.1246-3.1822
Arctic Star Lodge						
Creel	1973	46	-5.9774	3.3920	0.1167	3.1620-3.6220
Creel	1974	34	-4.8193	2.9676	0.1430	2.6773-3.2579
Creel	1978	384	-4.7729	2.9496	0.0433	2.8647-3.0345
Trophies	1978	72	-3.4787	2.5304	0.2282	2.0754-2.9854
Trophies & Creel	1978	456	-5.2646	3.1273	0.0322	3.0642-3.1904
Live Sampled	1978	505	-5.3246	3.1564	0.0352	3.0874-3.2254
Dead Sampled	1978	176	-4.3899	2.8092	0.0376	2.7355-2.8829
Live & Dead Sampled	1978	681	-4.6430	2.9103	0.1826	2.5524-3.2682
Combined[a]	1978	1137	-4.6902	2.9259	0.0145	2.8975-2.9543

[a] Includes data from creel, trophy, and live and dead (experimental netting) samples.

Table 36. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel sampled lake trout from Plummer's Great Bear Lake Lodge, 1977.

Age (yr)	No.	Fork Length (mm) Mean	SD	Weight (g) Mean	SD	Condition Factor	Males No.	%Mature	Females No.	%Mature	F/M Ratio	No. Sex Unknown
13	3	497	22.8	1617	160.7	1.32	1	0	2	0	2.0	-
14	3	525	76.0	1400	200.0	1.01	1	0	1	0	1.0	1
15	4	534	43.2	1712	532.9	1.13	3	0	1	0	0.3	-
16	4	551	17.2	1900	511.0	1.13	1	100	3	0	3.0	-
17	7	565	24.9	2207	437.2	1.21	3	0	4	0	0.7	-
18	10	578	15.0	2560	253.6	1.33	2	50	8	37	4.0	-
19	13	592	13.2	2765	325.6	1.33	7	86	6	33	0.9	-
20	16	599	22.6	2731	423.0	1.27	8	37	8	12	1.0	-
21	11	613	8.4	3100	410.5	1.35	8	75	3	0	0.4	-
22	20	624	22.8	3057	386.0	1.26	6	67	14	36	2.3	-
23	21	633	21.4	3221	339.7	1.27	8	75	13	46	1.6	-
24	31	642	22.3	3493	377.4	1.32	18	83	13	77	0.7	-
25	23	661	40.3	3633	570.8	1.26	8	87	15	60	1.9	-
26	25	672	25.3	3680	466.6	1.21	7	86	18	50	2.6	-
27	24	679	34.1	3848	474.7	1.23	7	100	17	35	2.4	-
28	26	707	32.8	4252	538.0	1.20	8	75	18	44	2.2	-
29	13	726	41.3	4338	664.3	1.13	3	33	10	30	3.3	-
30	13	727	41.5	4604	1038.7	1.18	7	86	6	33	0.9	-
31	6	721	11.2	4658	826.1	1.24	2	100	4	50	2.0	-
32	5	781	53.1	4830	1300.3	1.00	3	0	2	50	0.6	-
33	7	784	45.8	5307	994.3	1.09	4	50	3	67	0.7	-
34	4	821	37.2	6512	1159.3	1.18	1	100	3	67	3.0	-
35	4	756	48.8	4587	1094.2	1.05	1	100	3	0	3.0	-
36	5	804	60.0	6220	1640.7	1.18	-	-	5	20	-	-
37	3	896	20.1	7600	1915.7	1.04	1	100	2	0	2.0	-
38	3	894	12.9	7567	596.5	1.06	2	100	1	0	0.5	-
39	4	889	49.4	9150	1034.4	1.31	1	100	3	33	3.0	-
40	2	903	19.1	7800	282.8	1.06	-	-	2	50	-	-
41	-	-	-	-	-	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-	-	-	-	-	-
43	1	973	-	10900	-	1.18	1	100	-	-	-	-
Unknown	15	710	86.6	4307	1245.4	1.19	8	-	7	-	0.9	-
Total	326	-	-	-	-	-	130	66	195	38	1.5	1
Mean	25.3[a]	671	84.8	3828	1442.2	1.23	-	-	-	-	-	-

[a] Mean age.

Table 37. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel sampled lake trout from Branson's Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
14	1	375	-	600	-	1.14	-	-	1	0	-
17	6	477	64.9	1142	414.1	1.03	2	0	4	0	2.0
18	12	499	39.1	1471	357.7	1.17	5	0	7	0	1.4
19	10	541	46.9	2090	493.2	1.32	5	20	5	0	1.0
20	9	563	47.6	2117	611.4	1.17	4	0	5	20	1.3
21	9	594	42.7	2800	499.4	1.34	6	16	3	0	0.5
22	16	614	54.8	2891	707.6	1.24	6	0	10	10	1.7
23	18	611	43.8	2811	417.8	1.23	13	0	5	0	0.4
24	21	632	42.3	2957	502.6	1.17	9	0	12	8	1.3
25	16	643	54.9	3444	644.9	1.30	7	0	9	44	1.3
26	21	648	46.6	3450	568.3	1.27	8	0	13	54	1.6
27	25	674	53.8	3970	950.2	1.29	9	0	16	31	1.8
28	20	681	49.7	3908	723.5	1.24	10	0	10	50	1.0
29	11	714	55.0	4222	762.0	1.17	5	20	6	33	1.2
30	14	678	69.2	4075	1162.8	1.29	7	0	7	57	0.6
31	6	731	59.9	4842	918.4	1.26	1	0	5	20	5.0
32	12	696	46.2	4267	851.6	1.26	5	0	7	57	1.4
33	14	742	57.8	4839	1085.6	1.17	4	0	10	60	1.5
34	15	736	80.4	5110	1713.4	1.25	10	0	5	40	0.5
35	4	719	90.5	3975	1072.8	1.07	2	0	2	50	1.0
36	4	748	86.9	4888	1173.6	1.17	1	0	3	66	3.0
37	3	852	99.4	7000	1738.5	1.13	-	0	3	66	-
38	5	756	93.9	5060	1859.2	1.14	1	0	4	25	4.0
39	4	796	134.5	6275	2518.1	1.22	2	50	2	0	1.0
40	1	821	-	8000	-	1.45	-	-	1	0	-
41	2	772	78.5	6100	1909.2	1.31	-	-	2	100	-
42	1	935	-	9000	-	1.10	-	-	1	0	-
Unknown	38	703	107.9	4388	1961.3	1.22	-	-	-	-	-
Total	318	-	-	-	-	-	122	3.2	158	32.3	1.3
Mean	26.8 [a]	662	96.9	3727	1562.8	1.23	-	-	-	-	-

[a] Mean age.

Table 38. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel and dead sampled lake trout from experimental nets at Branson's Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
13	1	329	-	450	-	1.26	1	N/A	-	-	-	1
14	4	378	13.2	613	47.9	1.14	2		2	0	1.0	-
15	7	407	38.4	721	230.7	1.04	2		4	0	2.0	-
16	10	422	29.4	860	146.8	1.15	7		3	0	0.4	-
17	12	462	48.5	1120	367.7	1.12	3		9	0	3.0	-
18	16	488	40.5	1378	365.6	1.17	8		8	0	1.0	-
19	17	528	44.3	1865	532.7	1.25	5		12	0	2.4	-
20	15	553	46.7	1900	598.5	1.10	6		9	11	1.5	-
21	13	585	42.1	2531	607.4	1.25	7		6	0	0.9	-
22	19	607	54.2	2742	749.9	1.21	8		11	9	1.4	-
23	21	604	45.2	2702	477.6	1.23	15		6	0	0.4	-
24	21	632	42.3	2957	502.6	1.17	9		12	8	1.3	-
25	16	643	54.9	3444	644.9	1.30	7		9	44	1.3	-
26	22	644	48.5	3405	594.2	1.27	9		13	54	1.4	-
27	25	674	53.8	3970	950.2	1.29	9		16	31	1.7	-
28	21	685	51.5	3955	737.7	1.23	10		11	45	1.1	-
29	12	714	52.5	4196	732.5	1.16	6		6	33	1.0	-
30	14	678	69.2	4075	1162.8	1.29	7		7	57	1.0	-
31	6	730	59.9	4842	918.4	1.26	1		5	20	5.0	-
32	12	696	46.2	4267	851.6	1.26	5		7	57	1.4	-
33	14	742	57.8	4839	1085.6	1.17	4		10	60	2.5	-
34	15	736	80.4	5110	1713.4	1.25	10		5	40	0.5	-
35	4	719	90.5	3975	1072.8	1.06	2		2	50	1.0	-
36	4	748	86.9	4888	1173.6	1.17	1		3	66	3.0	-
37	3	852	99.4	7000	1738.5	1.13	-		3	66	-	-
38	5	756	93.9	5060	1859.2	1.14	1		4	25	4.0	-
39	4	796	134.5	6275	2518.1	1.22	2		2	0	1.0	-
40	1	821	-	8000	-	1.45	-		1	0	-	-
41	2	772	78.5	6100	1909.2	1.31	-		2	100	-	-
42	1	935	-	9000	-	1.10	-		1	0	-	-
Unknown	43	681	123.3	4049	2089.6	1.19	-		-	-	-	-
Total	380	-	-	-	-	-	147	-	189	27	1.3	1
Mean	25.5[a]	633	115.6	3344	1704.3	1.21	-	-	-	-	-	-

[a] Mean age.

Table 39. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for dead sampled lake trout from experimental nets at Branson's Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
13	1	329	-	450	-	1.26	1	N/A	-	N/A	-
14	3	379	16.0	617	57.7	1.14	2		1		0.5
15	7	407	38.4	721	230.7	1.04	2		5		2.5
16	10	421	29.4	860	146.8	1.15	7		3		0.4
17	6	447	20.5	1100	353.6	1.21	1		5		5.0
18	4	454	24.0	1100	248.3	1.16	3		1		0.3
19	7	510	35.8	1543	428.6	1.15	-		7		-
20	6	537	45.1	1575	440.2	0.99	2		4		2.0
21	4	566	39.0	1925	322.7	1.06	1		3		3.0
22	3	565	28.3	1950	433.0	1.07	2		1		0.5
23	3	559	26.1	2050	229.1	1.17	2		1		0.5
26	1	568	-	2450	-	1.34	1		-		-
28	1	760	-	4900	-	1.12	-		1		-
29	1	710	-	3900	-	1.09	1		-		-
Unknown	5	509	99.8	1470	928.4	1.03	-		-		-
Total	62	-	-	-	-	-	25	-	32	-	1.3
Mean	18.4[a]	485	86.6	1379	816.1	1.11	-	-	-	-	-

[a] Mean age.

Table 40. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel sampled lake trout from Plummer's Great Slave Lake Lodge, 1977.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Trophies	No. Sex Unknown
10	2	418	26.2	800	141.4	1.09	-	-	-	-	-	-	1
11	6	508	38.2	1650	637.2	1.20	3	0	3	0	1.0	-	-
12	30	503	32.7	1522	392.8	1.17	18	5	12	8	0.7	-	-
13	43	537	29.7	1830	404.7	1.17	23	13	20	10	0.9	-	-
14	65	565	27.6	2241	448.2	1.23	33	15	31	25	0.9	-	1
15	60	592	30.9	2671	650.9	1.27	33	33	27	33	0.8	-	-
16	46	615	34.3	2974	664.1	1.26	18	11	28	46	1.5	-	-
17	35	640	40.6	3278	836.1	1.23	18	39	16	37	0.9	-	1
18	33	665	32.8	3897	808.7	1.31	21	43	12	25	0.6	-	-
19	12	690	29.3	4360	610.1	1.32	5	40	7	85	1.4	-	-
20	16	701	22.2	4422	645.2	1.28	7	29	9	33	1.3	-	-
21	11	701	42.5	4595	897.1	1.32	2	50	9	33	4.5	-	-
22	10	712	22.7	4330	336.8	1.20	4	25	6	50	1.5	-	-
23	11	720	37.1	4866	778.5	1.30	5	80	6	50	1.2	-	-
24	7	736	20.4	5164	442.3	1.30	3	100	4	0	1.3	-	-
25	7	767	20.2	6171	649.3	1.37	2	50	5	80	2.5	-	-
26	11	755	52.7	5440	1102.7	1.25	5	80	6	100	1.2	-	-
27	9	817	32.1	6972	831.8	1.28	6	100	3	100	0.5	-	-
28	8	810	65.3	6137	1079.6	1.15	5	100	3	33	0.6	-	-
29	2	834	5.6	6850	636.4	1.18	1	100	1	0	1.0	-	-
30	2	861	54.4	7350	778.8	1.15	2	100	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-
32	1	867	-	7200	-	1.10	1	100	-	-	-	-	-
33	1	783	-	6000	-	1.25	-	-	-	-	-	-	-
Unknown	68	852	160.3	8384	3844.9	1.26	13	-	13	-	1.0	42	3
Total	496	-	-	-	-	-	228	31	223	34	1.0	42	3
Mean[a]	17.0[b]	627	90.4	3292	1551.0	1.25	-	-	-	-	-	-	-

[a] Mean values exclude trophy fish.

[b] Mean age.

Table 41. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel and dead sampled lake trout from experimental nets at Plummer's Great Slave Lake Lodge, 1977.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
4	5	159	25.8	57	12.0	1.84	-	-	1	0	-	4
5	31	195	16.9	75	19.9	1.00	1	0	-	-	-	30
6	14	224	16.8	107	23.3	0.94	2	0	2	0	1.0	10
7	8	256	25.0	180	72.4	1.04	1	0	3	0	3.0	4
8	6	280	15.3	222	56.0	1.04	-	-	1	0	-	5
9	8	342	41.2	431	203.4	1.02	2	0	3	0	1.5	3
10	10	415	27.1	765	282.9	1.04	3	0	6	0	2.0	1
11	21	458	48.9	1163	509.5	1.14	9	0	12	8	1.3	-
12	42	499	32.4	1493	367.4	1.18	20	10	22	14	1.1	-
13	50	537	30.0	1849	411.6	1.18	25	16	25	8	1.0	-
14	77	564	28.8	2254	423.6	1.25	35	17	41	34	1.2	1
15	77	588	36.1	2637	678.3	1.27	40	33	37	38	0.9	-
16	57	613	33.9	2956	633.5	1.27	23	26	34	44	1.5	-
17	39	641	39.7	3327	834.4	1.24	20	40	18	33	0.9	1
18	34	664	33.6	3912	801.0	1.34	21	43	13	31	0.6	-
19	14	694	31.1	4537	756.9	1.35	6	50	8	88	1.3	-
20	19	701	22.9	4510	651.8	1.30	7	29	12	33	1.7	-
21	13	701	40.4	4588	861.0	1.32	3	33	10	40	3.3	-
22	10	712	22.7	4330	336.8	1.20	4	25	6	50	1.5	-
23	12	724	37.3	5035	953.9	1.32	5	80	7	57	1.4	-
24	10	748	27.6	5415	679.9	1.29	4	100	6	17	1.5	-
25	7	767	20.2	6171	649.3	1.37	2	50	5	80	2.5	-
26	12	760	53.0	5608	1200.7	1.26	5	80	7	100	1.4	-
27	10	813	32.9	6925	798.3	1.29	6	100	4	100	0.7	-
28	8	810	65.3	6137	1079.6	1.15	5	100	3	66	0.6	-
29	3	852	32.0	8300	2551.5	1.32	2	100	1	100	0.5	-
30	2	861	54.4	7350	777.8	1.15	2	100	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	1	867	-	7200	-	1.10	1	100	-	-	-	-
33	1	783	-	6000	-	1.25	-	-	1	100	-	-
Unknown	30	661	94.2	4008	1768.5	1.30	-	-	-	-	-	-
Total	631	-	-	-	-	-	254	33	288	35	1.1	59
Mean	14.6[a]	570	154.3	2811	1802.8	1.23	-	-	-	-	-	-

[a] Mean age.

Table 42. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for dead sampled lake trout from experimental nets at Plummer's Great Slave Lake Lodge, 1977.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
4	5	159	25.8	57	12.0	1.84	-	-	1	0	-	4
5	31	195	16.9	75	19.8	1.00	1	0	-	-	-	30
6	14	224	16.8	107	23.3	0.94	2	0	2	0	1.0	10
7	8	256	25.0	180	72.4	1.04	1	0	3	0	3.0	4
8	6	280	15.3	222	56.0	1.04	-	-	1	0	-	5
9	8	342	41.2	431	203.4	1.02	2	0	3	0	1.5	3
10	8	414	29.1	756	315.6	1.02	3	0	5	0	1.7	-
11	15	438	37.2	968	289.1	1.12	6	0	9	11	1.5	-
12	12	489	30.7	1419	296.4	1.20	2	50	10	20	5.0	-
13	7	538	33.6	1964	467.9	1.24	2	50	5	0	2.5	-
14	12	557	35.2	2325	253.6	1.36	2	50	10	60	5.0	-
15	17	573	48.3	2515	776.8	1.30	7	29	10	50	1.4	-
16	11	604	32.3	2882	505.1	1.30	5	80	6	33	1.2	-
17	4	651	32.8	3750	793.7	1.34	2	50	2	0	1.0	-
18	1	610	-	4400	-	1.94	-	-	1	100	-	-
19	2	715	45.2	5600	848.5	1.53	1	100	1	100	1.0	-
20	3	701	32.3	4983	550.7	1.45	-	-	3	33	-	-
21	2	701	38.2	4550	919.2	1.31	1	0	1	100	1.0	-
22	-	-	-	-	-	-	-	-	-	-	-	-
23	1	761	-	6900	-	1.56	-	-	1	100	-	-
24	3	776	22.9	6000	872	1.28	1	100	2	50	2.0	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	1	814	-	7450	-	1.38	-	-	1	100	-	-
27	1	776	-	6500	-	1.39	-	-	1	100	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	1	889	-	11200	-	1.59	1	100	-	-	-	-
Unknown	4	566	82.1	2700	1243.0	1.38	2	-	2	-	1.0	-
Total	177	-	-	-	-	-	41	31	80	30	1.9	56
Mean	11.1[a]	424	185.4	1579	1822.0	1.18	-	-	-	-	-	-

[a] Mean age.

Table 43. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for all lake trout sampled at Arctic Star Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
5	11	179	7.6	90	51.6	1.44					-	11
6	24	190	8.4	118	44.9	1.70	1	0	1	0	1.0	22
7	15	196	9.4	130	45.5	1.70	2	0	1	0	0.5	12
8	11	208	10.4	155	65.0	1.70	1	0	-	-	-	10
9	6	234	17.7	167	51.6	1.27	3	0	-	-	-	3
10	3	302	7.6	333	57.7	1.21	-	-	2	0	-	1
11	2	312	8.5	400	-	1.32	-	-	1	0	-	1
12	4	388	25.2	625	170.7	1.05	2	0	1	0	0.5	1
13	9	452	54.4	994	387.6	1.03	4	0	5	0	1.3	-
14	22	465	51.0	1227	413.3	1.19	7	14	15	0	2.1	-
15	20	509	42.9	1550	395.4	1.16	8	13	12	25	1.5	-
16	38	536	31.8	1823	363.1	1.18	18	11	20	10	1.1	-
17	43	555	31.7	2081	384.9	1.21	22	27	21	19	1.0	-
18	47	576	28.0	2372	337.9	1.24	23	26	24	38	1.0	-
19	37	591	34.9	2581	485.2	1.24	19	37	18	22	0.9	-
20	36	605	36.2	2798	527.9	1.26	15	33	21	29	1.4	-
21	27	594	43.3	2644	571.9	1.25	13	38	14	21	1.1	-
22	22	640	35.9	3318	629.2	1.26	14	57	8	38	0.6	-
23	25	626	39.8	3176	654.7	1.29	9	33	16	69	1.8	-
24	26	633	50.3	3231	766.7	1.26	13	38	13	38	1.0	-
25	24	666	52.9	3921	859.2	1.31	9	33	15	53	1.7	-
26	16	703	61.7	4350	1173.0	1.23	10	40	6	50	0.6	-
27	16	731	68.8	5206	1522.0	1.31	10	67	6	50	0.6	-
28	14	757	70.0	5500	1638.9	1.24	7	100	7	60	1.0	-
29	6	784	73.5	6583	2035.1	1.34	2	100	4	50	2.0	-
30	7	795	65.3	5871	1433.8	1.16	6	80	1	100	0.2	-
31	8	832	62.7	8175	2499.0	1.39	3	66	5	80	1.7	-
32	5	856	41.6	7860	1128.3	1.26	-	-	5	80	-	-
33	13	859	37.8	7815	1399.3	1.23	9	40	4	50	0.4	-
34	10	843	50.5	7920	1720.3	1.30	6	66	4	100	0.7	-
35	9	873	43.3	9078	2066.3	1.36	3	0	6	50	2.0	-
36	7	894	37.5	10114	2821.6	1.39	3	66	4	50	1.3	-
37	8	910	32.0	9338	1050.1	1.25	5	80	3	66	0.7	-
38	4	920	38.8	9900	3082.2	1.25	1	100	3	100	3.0	-
39	5	934	63.6	11380	3826.5	1.36	2	50	3	100	1.5	-
40	3	930	20.6	10100	1153.3	1.26	2	100	1	100	0.5	-
41	1	935	-	13500	-	1.65	-	-	1	100	-	-
42	1	955	-	12500	-	1.44	-	-	1	0	-	-
44	1	988	-	12300	-	1.28	-	-	1	100	-	-
49	1	1018	-	14000	-	1.33	-	-	1	100	-	-
Unknown	551	614	113.9	3377	2211.5	1.30	-	-	-	-	-	-
Total	1138	-	-	-	-	-	252	37	274	33	1.1	61
Mean	20.5[a]	600	157.8	3352	2541.5	1.29	-	-	-	-	-	-

[a] Mean age.

Table 44. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel sampled lake trout from Arctic Star Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
13	4	496	29.8	1275	340.3	1.03	1	0	3	0	3.0
14	10	507	39.8	1590	310.7	1.21	4	25	6	0	1.5
15	11	522	51.9	1645	498.7	1.13	4	25	7	29	1.8
16	25	548	24.3	1943	349.7	1.18	11	18	14	7	1.3
17	32	561	27.0	2131	344.9	1.20	18	28	14	29	0.8
18	42	578	25.4	2390	310.6	1.24	19	21	23	39	1.2
19	29	598	31.3	2666	403.8	1.25	13	54	16	25	1.2
20	33	605	37.3	2803	545.8	1.26	14	29	19	26	1.4
21	22	602	38.8	2677	578.1	1.22	10	50	12	25	1.2
22	18	648	32.9	3394	666.4	1.24	14	57	4	0	0.3
23	20	630	40.2	3215	670.0	1.28	8	38	12	67	1.5
24	21	637	43.7	3267	590.2	1.26	10	30	11	45	1.1
25	21	665	56.2	3919	888.0	1.32	9	66	12	58	1.3
26	15	706	62.5	4427	1172.0	1.24	10	40	5	60	0.5
27	12	739	34.8	5050	716.7	1.25	7	57	5	40	0.7
28	9	751	71.7	5233	1535.4	1.22	5	100	4	25	0.8
29	4	767	64.0	5875	853.9	1.31	1	100	3	67	3.1
30	6	794	71.5	5700	1489.9	1.13	5	80	1	100	0.2
31	2	798	3.5	6100	282.8	1.20	-	-	2	50	-
32	3	851	57.8	7167	702.4	1.18	-	-	3	67	-
33	7	851	26.3	7129	752.1	1.15	5	60	2	0	0.4
34	5	815	48.7	6820	1545.0	1.24	4	50	1	100	0.3
35	1	800	-	5800	-	1.13	-	-	1	100	-
36	2	865	35.4	7550	777.8	1.17	1	0	1	100	1.0
37	2	914	82.7	7750	494.9	1.03	2	50	1	0	0.5
38	1	883	-	8200	-	1.19	-	-	1	100	-
Unknown	27	661	100.9	3776	1807.2	1.22	-	-	-	-	-
Total	384	-	-	-	-	-	175	40	182	35	1.0
Mean	21.4[a]	631	94.1	3274	1579.4	1.23	-	-	-	-	-

[a] Mean age.

Table 45. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for trophy lake trout from Arctic Star Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
27	2	792	136.5	7950	2192.0	1.63	1	100	1	0	1.0
28	2	823	24.7	7650	212.1	1.38	-	-	2	100	-
29	1	893	-	10500	-	1.47	-	-	1	100	-
30	1	800	-	6900	-	1.35	1	100	-	-	-
31	5	853	73.9	9280	2599.4	1.48	3	100	2	50	0.7
32	2	865	-	8900	707.1	1.38	-	-	2	100	-
33	6	868	49.2	8617	1609.2	1.31	4	50	2	100	0.5
34	5	871	37.1	9020	1116.7	1.36	2	50	3	66	1.5
35	8	883	35.6	9488	1775.6	1.38	3	100	5	60	1.7
36	5	906	34.7	11140	2681.0	1.48	2	100	3	66	1.5
37	6	908	7.4	9867	388.2	1.32	3	66	3	66	1.0
38	3	933	36.6	10467	3510.4	1.27	1	100	2	50	2.0
39	5	934	63.6	11380	3826.5	1.36	2	100	3	100	1.5
40	3	930	20.6	10100	1153.3	1.26	2	100	1	0	0.5
41	1	935	-	13500	-	1.65	-	-	1	0	-
42	1	955	-	12500	-	1.44	-	-	1	100	-
43	-	-	-	-	-	-	-	-	-	-	-
44	1	988	-	12300	-	1.28	-	-	1	100	-
45	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	-	-	-	-	-
49	1	1018	-	14000	-	1.33	-	-	1	100	-
Unknown	14	871	41.7	9186	1210.8	1.39	-	-	-	-	-
Total	72	-	-	-	-	-	24	88	34	71	1.4
Mean	35.2[a]	887	56.3	9721	2122.0	1.38	-	-	-	-	-

[a] Mean age.

Table 46. Mean length, mean weight, condition factor, maturity and sex ratio by age for creel sampled and dead sampled lake trout from experimental nets at Arctic Star Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
5	11	179	7.6	90	51.6	1.44	-	-	-	-	-	11
6	24	190	8.4	118	44.9	1.71	1	0	1	0	1.0	22
7	15	196	9.4	130	45.5	1.70	2	0	1	0	0.5	12
8	11	208	10.4	155	65.0	1.70	1	0	-	-	-	10
9	6	234	17.8	167	51.6	1.27	3	0	-	-	-	3
10	3	302	7.6	333	57.7	1.21	-	-	2	0	-	1
11	2	312	8.5	400	-	1.32	-	-	1	0	-	1
12	4	388	25.2	625	170.8	1.05	2	0	1	0	0.5	1
13	9	452	54.4	994	387.7	1.03	4	0	5	0	1.3	-
14	22	465	51.0	1227	413.4	1.19	7	14	15	0	2.1	-
15	20	509	42.9	1550	395.4	1.16	8	13	12	25	1.5	-
16	38	536	31.8	1823	363.1	1.18	18	11	20	10	1.1	-
17	43	555	31.7	2081	385.0	1.21	22	27	21	19	1.0	-
18	47	576	28.0	2372	337.9	1.24	23	26	24	38	1.0	-
19	37	591	34.9	2581	485.2	1.24	19	37	18	22	0.9	-
20	36	605	36.2	2798	527.9	1.26	15	33	21	29	1.4	-
21	27	594	43.3	2644	572.0	1.25	13	38	14	21	1.1	-
22	22	640	36.0	3318	629.2	1.26	14	57	8	38	0.6	-
23	25	626	39.8	3176	654.7	1.29	9	33	16	69	1.8	-
24	26	633	50.3	3231	766.7	1.26	13	38	13	38	1.0	-
25	24	666	52.9	3921	859.2	1.31	9	33	15	53	1.7	-
26	16	703	61.7	4350	1173.0	1.23	10	40	6	50	0.6	-
27	14	722	58.1	4814	990.0	1.26	9	67	5	40	0.6	-
28	12	746	69.4	5142	1470.8	1.22	7	100	5	40	0.7	-
29	5	762	56.3	5800	758.3	1.32	2	100	3	67	1.5	-
30	6	794	71.5	5700	1490.0	1.13	5	80	1	100	0.2	-
31	3	798	2.5	6333	450.9	1.25	-	-	3	67	-	-
32	3	851	57.8	7167	702.4	1.18	-	-	3	67	-	-
33	7	851	26.3	7129	752.1	1.15	5	60	2	0	0.4	-
34	5	815	48.7	6820	1545.0	1.24	4	50	1	100	0.3	-
35	1	800	-	5800	-	1.13	-	-	1	100	-	-
36	2	865	35.4	7550	777.8	1.17	1	0	1	100	1.0	-
37	2	914	82.7	7750	495.0	1.03	2	50	-	-	-	-
38	1	883	-	8200	-	1.19	-	-	1	100	-	-
Unknown	32	631	133.8	3468	1872.1	1.23	-	-	-	-	-	-
Total	561	-	-	-	-	-	228	36	240	32	1.1	61
Mean	18.9[a]	558	166.8	2661	1766.4	1.27	-	-	-	-	-	-

[a] Mean age.

Table 47. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for dead sampled lake trout from experimental nets at Arctic Star Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio	No. Sex Unknown
5	11	179	7.6	90	51.6	1.44	-	-	-	-	-	11
6	24	190	8.4	118	44.9	1.71	1	0	1	0	1.0	22
7	15	196	9.4	130	45.5	1.70	2	0	1	0	0.5	12
8	11	208	10.4	155	65.0	1.70	1	0	-	-	-	10
9	6	234	17.8	167	51.7	1.27	3	0	-	-	-	3
10	3	302	7.6	333	57.7	1.21	-	-	2	0	-	1
11	2	312	8.5	400	-	1.32	-	-	1	0	-	1
12	4	388	25.2	625	170.8	1.05	2	0	1	0	0.5	1
13	5	417	43.3	770	268.3	1.02	3	0	2	0	0.7	-
14	12	429	25.0	925	167.2	1.16	3	0	9	0	3.0	-
15	9	494	23.3	1433	180.3	1.19	4	0	5	20	1.3	-
16	13	513	33.1	1592	272.2	1.17	7	0	6	17	0.9	-
17	11	539	39.6	1936	471.8	1.23	4	25	7	0	1.8	-
18	5	556	43.3	2220	540.4	1.27	4	50	1	0	0.3	-
19	8	565	37.3	2275	649.7	1.24	6	0	2	0	0.3	-
20	3	608	25.7	2733	321.5	1.22	1	100	2	50	2.0	-
21	5	560	50.4	2500	583.1	1.42	3	0	2	0	0.7	-
22	4	601	20.8	2975	250.0	1.37	-	-	4	75	-	-
23	5	611	38.5	3020	634.0	1.31	1	0	4	75	4.0	-
24	5	616	76.5	3080	1377.3	1.26	3	67	2	0	0.7	-
25	3	674	21.5	3933	776.7	1.28	-	-	3	33	-	-
26	1	656	-	3200	-	1.13	-	-	1	0	-	-
27	2	624	88.4	3400	1555.6	1.35	2	100	-	-	-	-
28	3	729	73.1	4867	1569.5	1.23	2	100	1	100	0.5	-
29	1	744	-	5500	-	1.34	1	100	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	1	798	-	6800	-	1.34	-	-	1	100	-	-
Unknown	5	471	184.5	1810	1364.0	1.25	-	-	-	-	-	-
Total	177	-	-	-	-	-	53	21	58	21	1.1	61
Mean	13.6[a]	401	181.6	1322	1371.0	1.37	-	-	-	-	-	-

[a] Mean age.

Table 48. Mean fork length, mean weight, condition factor, maturity and sex ratio by age for creel sampled and trophy lake trout from Arctic Star Lodge, 1978.

Age (yr)	No.	Fork Length (mm) Mean	Fork Length (mm) SD	Weight (g) Mean	Weight (g) SD	Condition Factor	Males No.	Males %Mature	Females No.	Females %Mature	F/M Ratio
13	4	496	29.8	1275	340.3	1.03	1	0	3	0	3.0
14	10	507	39.8	1590	310.7	1.21	4	25	6	0	1.5
15	11	522	51.9	1645	498.8	1.13	4	25	7	29	1.8
16	25	548	24.3	1943	349.7	1.18	11	18	14	27	1.3
17	32	561	27.0	2131	345.0	1.20	18	28	14	29	0.8
18	42	578	25.4	2390	310.6	1.24	19	21	23	39	1.2
19	29	598	31.3	2666	403.8	1.25	13	54	16	25	1.2
20	33	605	37.3	2803	545.8	1.26	14	29	19	26	1.4
21	22	602	38.8	2677	578.1	1.22	10	50	12	25	1.2
22	18	648	32.9	3394	666.4	1.24	14	57	4	0	0.3
23	20	630	40.2	3215	669.9	1.28	8	38	12	67	1.5
24	21	637	43.7	3267	590.2	1.26	10	30	11	45	1.1
25	21	665	56.2	3919	888.0	1.32	9	33	12	58	1.3
26	15	706	62.5	4427	1172.0	1.24	10	40	5	60	0.5
27	14	746	53.1	5464	1383.2	1.30	8	63	6	33	0.8
28	11	764	70.8	5672	1687.1	1.25	5	100	6	50	1.2
29	5	792	79.2	6800	2196.6	1.34	1	100	4	75	4.0
30	7	795	65.3	5871	1433.8	1.16	6	83	1	100	0.2
31	7	837	66.1	8371	2631.7	1.40	3	100	4	50	1.3
32	5	856	41.6	7860	1128.3	1.26	-	-	5	80	-
33	13	859	37.8	7815	1399.3	1.23	9	56	4	50	0.4
34	10	843	50.5	7920	1720.3	1.30	6	67	4	75	0.7
35	9	873	43.3	9078	2066.3	1.36	3	100	6	67	2.0
36	7	894	37.5	10114	2821.6	1.39	3	67	4	75	1.3
37	8	910	32.0	9338	1050.1	1.25	5	60	3	67	0.6
38	4	920	38.8	9900	3082.2	1.25	1	100	3	67	3.0
39	5	934	63.6	11380	3826.5	1.36	2	100	3	100	1.5
40	3	930	20.6	10100	1153.3	1.26	2	100	1	0	0.5
41	1	935	-	13500	-	1.65	-	-	1	0	-
42	1	955	-	12500	-	1.44	-	-	1	100	-
43	-	-	-	-	-	-	-	-	-	-	-
44	1	988	-	12300	-	1.28	-	-	1	100	-
45	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	-	-	-	-	-
49	1	1018	-	14000	-	1.33	-	-	1	100	-
Unknown	41	733	131.6	5623	3057.0	1.28	-	-	-	-	-
Total	456	-	-	-	-	-	199	46	216	41	1.1
Mean	23.4[a]	671	129.2	4292	2888.0	1.25	-	-	-	-	-

[a] Mean age.

Table 49. Annual mortality rates for lake trout from four sport fishing lodges on Great Bear and Great Slave lakes, 1972-1978.

Lodge	Year	Type of frequency data of age-classes used	Age-classes used	Survival (S)	SE of S	Var. of S	Annual Mortality Rate (A), where A=1-S
Great Bear Lake Lodge	1972	actual and irregular[a]	26-42	0.7227	0.0161	0.0003	0.2773
		moving mean[b]	26-42	0.7106	0.0177	0.0003	0.2894
	1973	actual and irregular	22-47	0.9056	0.0054	0.0000	0.0944
		moving mean	22-47	0.9247	0.0054	0.0000	0.0753
	1977	actual and irregular	25-40	0.8054	0.0135	0.0002	0.1946
		moving mean	25-40	0.7946	0.0148	0.0002	0.2054
Branson's Lodge	1972-73[c]	actual and irregular	20-48	0.8923	0.0098	0.0001	0.1077
		moving mean	20-48	0.8918	0.0074	0.0001	0.1082
	1974	actual and irregular	22-40	0.8433	0.0170	0.0003	0.1567
		moving mean	22-40	0.8876	0.0119	0.0001	0.1124
	1978	actual and irregular	28-42	0.8101	0.0157	0.0003	0.1899
		moving mean	28-42	0.8064	0.0119	0.0001	0.1936
Great Slave Lake Lodge	1972	actual and irregular	20-33	0.7063	0.0139	0.0002	0.2937
		moving mean	20-33	0.6923	0.0154	0.0002	0.3077
	1973	actual and irregular	12-23	0.9061	0.0083	0.0001	0.0939
		moving mean	12-23	0.8161	0.0087	0.0001	0.1839
	1974	actual and irregular	16-30	0.8229	0.0098	0.0001	0.1771
		moving mean	16-30	0.8227	0.0103	0.0001	0.1773
	1977	actual and irregular	15-30	0.7964	0.0109	0.0001	0.2036
		moving mean	15-30	0.7967	0.0115	0.0001	0.2033
Arctic Star Lodge	1978	actual and irregular	19-38	0.8351	0.0101	0.0001	0.1649
		moving mean	19-38	0.8302	0.0072	0.0001	0.1698

[a] The true or actual number frequency at each age-class.

[b] Mean number frequency of two successive age-classes.

[c] Sample combined for 1972 and 1973.

Table 50. Summary of biological data for lake trout at four lodges on Great Bear and Great Slave lakes, 1972-78.

Lake/Lodge	Year	Creel Sampled Data[a]						Trophy Data			
		No. of Fish	Mean Age (yr)	Mean Fork Length(mm)	Mean Weight(g)	Females %Mature	Mortality Rate(%)	No. of Fish	Mean Age (yr)	Mean Fork Lengtn(mm)	Mean Weight(g)
GREAT BEAR LAKE											
Great Bear Lake Lodge (Plummer's)	1972	561	24.2	675	3617	-	28.7	-	-	-	-
	1973	509	26.8	664	3419	48	9.5	-	-	-	-
	1977	326	25.3	671	3828	38	20.5	17[b]	39.8	1038	12979
Branson's Lodge	1972-73	275	23.3	624	2764	45	10.8	-	-	-	-
	1974	210	23.0	632	3216	-	11.2	-	-	-	-
	1978	318	26.8	662	3727	32	19.4	29	-	982	11532
GREAT SLAVE LAKE											
Great Slave Lake Lodge (Plummer's)	1972	916	17.7	687	5826	-	31.8	-	-	-	-
	1973	491	16.1	605	3190	25	19.6	-	-	-	-
	1974	636	17.3	641	3414	-	17.7	-	-	-	-
	1977	454	17.0	627	3292	37	20.3	42	-	967	10969
Arctic Star Lodge	1973	46	16.5	567	2780	42	-	-	-	-	-
	1974	34	15.0	667	3953	-	-	-	-	-	-
	1978	384	21.4	631	3274	36	17.0	72	35.2	887	9721

[a] Does not include trophy data.

[b] 1976 data - obtained from Hawkins Taxidermists Ltd.

Table 51. Data on the conversion of round weights to filleted, dressed (head-on) and dressed (headless) forms of lake trout from Plummer's Great Bear Lake and Great Slave Lake lodges, 1977.

Lodge	Form	No. of Samples	Conversion Factor[a]	% Flesh Retained from Round Weight		
				Mean	SD	Range
Great Bear Lake Lodge	Filleted	144	1.70	41	8.67	15-59
Great Slave Lake Lodge	Dressed (head-on)	44	1.22	81	3.97	72-88
	Dressed (headless)	66	1.47	66	4.64	58-80
	Filleted	106	1.64	39	6.10	28-60

[a] Round weight equivalent is weight in particular form multiplied by the conversion factor.

Table 52. Comparison of standard, total and fork lengths for lake trout from Great Bear Lake (Branson's Lodge) and Great Slave Lake (Arctic Star Lodge), 1978.

	Length Measured	No. of Fish	Length			Conversion Factor[a] To Fork Length
			Mean	SD	Range	
Great Bear Lake	Standard	382	578	107.4	303-941	0.926
	Total	382	697	125.2	356-1100	1.117
	Fork	610	624	158.1	329-1200	-
Great Slave Lake	Standard	633	545	175.1	146-935	0.908
	Total	633	655	206.5	180-1115	1.091
	Fork	1138	600	157.8	164-1025	-

[a] Ratio based on comparison of means.

Table 53. Stomach contents from lake trout at Branson's Lodge (Great Bear Lake) and Arctic Star Lodge (Great Slave Lake), 1978.

	Branson's Lodge		Arctic Star Lodge	
Number of stomachs examined	386		570	
Number empty	175 (45%)		214 (38%)	
Number feeding	211 (55%)		356 (62%)	
	Occurrence in those feeding		Occurrence in those feeding	
	No.	%	No.	%
Fish -				
Coregonus artedii - cisco	34	16	10	3
Coregonus clupeaformis - whitefish	1	<1	1	<1
Cottids - unident. sculpins	3	1	2	<1
Salvelinus namaycush - lake trout	3	1	-	-
Fish remains - unident.	42	20	214	60
Invertebrates -				
Amphipods	19	9	-	-
Molluscs	2	<1	-	-
Insects -				
Diptera (true flies - adults & larvae)	87	41	-	-
Hymenoptera (bees, ants etc.)	31	15	5	1
Lepidoptera (water moths)	4	2	3	<1
Trichoptera (caddishfly larvae)	4	2	-	-
Plecoptera (stonefly larvae)	15	7	-	-
Coleoptera (water beetles)	1	<1	-	-
Odonata (dragonfly larvae)	5	2	-	-
Unidentified remains	33	16	160	45
Other				
Vegetable matter	4	2	-	-
Nondigestible matter (gravel)	12	6	1	<1

Table 54. Data on recaptured lake trout, tagged and released at Taltheilei Narrows - Great Slave Lake, caught by anglers and Fisheries and Oceans personnel, 1973-78.

No.	Tagging Information			Recapture Information				At Liberty		Distance Moved(km)		Total Change(±)		Annual Increment(±)	
	Date	Length (mm)	Weight (g)	Location	Date	Length (mm)	Weight (g)	Days	Years	Direct	By Water	Length (mm)	Weight (g)	Length (mm)	Weight (g)
1	10/06/73	535	1800	Big Island	31/07/75	-	3632	781	2.1	5	5	-	+1832	-	+ 916
2	19/06/73	695	6200	South Island	16/06/74	-	-	362	1.0	5	5	-	-	-	-
3	17/06/73	552	2000	"	05/08/74	-	2724	414	1.1	5	5	-	+ 724	-	+ 658
4	17/06/73	550	2000	Taltheilei Narrows	20/07/74	-	-	398	1.1	1	1	-	-	-	-
5	18/06/73	990	11650	Big Island	06/08/74	-	11824	414	1.1	5	5	-	+ 174	-	+ 158
6	26/06/73	874	13050	Taltheilei Narrows	02/07/74	890	-	371	1.0	3	3	+ 16	-	+16	-
7	04/07/73	880	8060	South Island	12/07/74	-	-	373	1.0	5	5	-	-	-	-
8	19/07/73	857	8720	"	28/06/74	-	-	344	0.9	5	5	-	-	-	-
9	20/07/73	720	6800	Taltheilei Narrows	05/08/74	733	7300	381	1.0	1	1	+ 13	+ 500	+13	+ 500
10	25/08/73	609	2600	Redcliff Island	15/03/74	-	-	202	0.6	32	62	-	-	-	-
11	25/08/73	662	4100	Narrow Island	04/02/74	-	-	163	0.5	51	53	-	-	-	-
12	25/08/73	610	3100	Taltheilei Narrows	07/08/74	-	-	347	0.9	1	1	-	-	-	-
13	25/08/73	620	3050	Sulphur Point	08/01/74	-	-	136	0.4	256	268	-	-	-	-
14	25/08/73	585	2600	Et-Then Island	11/03/74	-	-	198	0.5	40	40	-	-	-	-
15	20/09/73	810	6300	Big Island	06/08/74	-	-	320	0.9	5	5	-	-	-	-
16	20/09/73	665	3100	South Island	22/06/74	-	-	275	0.8	5	5	-	-	-	-
17	20/09/73	705	4300	Reliance	07/08/74	-	-	321	0.9	122	136	-	-	-	-
18	21/09/73	765	6600	Taltheilei Narrows	27/07/74	-	-	300	0.8	1	1	-	-	-	-
19	21/09/73	759	5900	Murky Channel	01/03/75	-	-	526	1.4	42	56	-	-	-	-
20	17/06/73	530	1600	Taltheilei Narrows	17/07/77	580	2400	1491	4.1	0	0	+ 50	+ 800	+12	+ 200
21	21/06/73	570	3200	"	04/08/77	775	5650	1505	4.1	0	0	+205	+2450	+50	+ 598
22	10/07/73	755	6500	"	27/06/77	780	7200	1448	4.0	1	1	+ 25	+ 700	+ 6	+ 175
23	25/08/73	585	2400	"	29/06/77	738	3900	1404	3.9	2	2	+153	+1500	+39	+ 385
24	23/08/73	-	-	-	26/07/77	-	5350	1483	4.1	-	-	-	-	-	-
25	18/06/73	758	6200	Taltheilei Narrows	29/07/77	825	6850	1502	4.1	3	3	+ 67	+ 650	+16	+ 159
26	27/08/73	832	8200	"	10/06/77	855	8900	1383	3.8	2	2	+ 23	+ 700	+ 6	+ 184
27	20/06/73	-	-	-	03/08/77	-	-	1505	4.1	-	-	-	-	-	-
28	21/06/73	680	4400	Taltheilei Narrows	21/06/73	-	-	0	0	2	2	-	-	-	-
29	20/09/73	704	3475	Matonabee Point	11/08/78	-	-	1786	4.9	126	140	-	-	-	-
30	11/06/73	925	11500	Arctic Star Lodge	10/07/78	942	10200	1855	5.1	80	80	+ 17	-1300	+ 3	- 255
31	06/06/74	615	3400	Taltheilei Narrows	29/07/75	-	3632	418	1.2	2	2	-	+ 232	-	+ 193
32	22/06/74	720	5300	Shelter Bay	22/09/74	-	-	92	0.3	58	64	-	-	-	-
33	06/06/74	705	5200	Taltheilei Narrows	12/09/74	-	5200	98	0.3	1	1	-	0	-	0
34	15/09/74	575	2200	Sosan Island	07/08/76	-	2700	693	1.9	25	25	-	+ 500	-	+ 263
35	10/09/74	815	6500	South Island	01/08/76	-	7400	691	1.9	5	5	-	+ 900	-	+ 474
36	14/09/74	585	2700	"	01/08/76	-	2700	695	1.9	5	5	-	0	-	0
37	12/09/74	755	5400	Big Island	22/07/76	-	7200	679	1.9	5	5	-	+1800	-	+1000
38	14/09/74	715	4700	Grayling Gap	06/07/76	-	5300	661	1.8	16	16	-	+ 600	-	+ 333
39	04/09/74	755	6200	McKinlay River	30/07/76	-	7900	695	1.9	16	16	-	+1700	-	+ 895
40	16/06/74	735	5500	Taltheilei Narrows	27/06/77	-	6300	1107	3.0	1	1	-	+ 800	-	+ 267
41	15/09/74	585	3300	"	27/06/77	618	3500	1016	2.8	1	1	+ 33	+ 200	+12	+ 71
42	10/09/74	588	2800	"	29/06/77	629	3200	1019	2.8	2	2	+ 41	+ 400	+15	+ 143
43	22/06/74	695	5200	Big Island	23/07/77	701	5200	1127	3.1	5	5	+ 6	0	+ 2	0
44	13/09/74	815	8900	Taltheilei Narrows	27/07/77	835	10200	1248	3.4	2	2	+ 20	+ 300	+ 6	+ 88
45	15/09/74	545	2000	Reliance	02/08/77	-	3600	1252	3.4	122	128	-	+1600	-	+ 471
46	29/06/74	775	5900	McKinlay River	10/07/78	-	5900	1472	4.0	14	18	-	0	-	0
47	10/09/74	930	10200	Taltheilei Narrows	06/07/78	-	-	1581	4.3	0	0	-	-	-	-

Table 54. Continued.

No.	Tagging Information			Recapture Information				At Liberty		Distance Moved(km)		Total Change(±)		Annual Increment(±)	
	Date	Length (mm)	Weight (g)	Location	Date	Length (mm)	Weight (g)	Days	Years	Direct	By Water	Length (mm)	Weight (g)	Length (mm)	Weight (g)
48	16/07/77	605	2700	Taltheilei Narrows	29/07/77	-	-	13	<0.1	1	1	-	-	-	-
49	14/07/77	497	1450	"	22/07/77	-	-	8	<0.1	1	1	-	-	-	-
50	25/06/77	922	13060	"	02/07/77	-	-	7	<0.1	2	2	-	-	-	-
51	24/06/77	863	7000	"	02/07/77	-	-	8	<0.1	2	2	-	-	-	-
52	28/06/77	560	2100	"	02/07/77	-	-	4	<0.1	1	1	-	-	-	-
53	28/06/77	690	5200	"	27/07/77	690	5200	29	<0.1	2	2	0	0	0	0
54	27/06/77	-	-	"	-	-	8170	-	-	1	1	-	-	-	-
55	27/06/77	709	4850	"	-	666	3150	-	-	1	1	-	-	-	-
56	14/07/77	700	4350	"	02/08/77	-	4350	19	<0.1	2	2	-	0	-	0
57	27/06/77	650	4086	Keith Island	16/08/77	-	-	50	0.1	55	61	-	-	-	-
58	23/08/77	898	10050	Taltheilei Narrows	11/07/78	932	10000	322	0.9	0	0	+34	-50	+38	-56
59	26/08/77	727	5700	Pekanatui Point	01/08/78	-	-	340	0.9	53	58	-	-	-	-
60	18/08/77	884	7500	Taltheilei Narrows	29/07/78	-	-	345	1.0	0	0	-	-	-	-
61	24/08/77	590	2600	Blanchet Island	15/08/78	-	-	356	1.0	94	99	-	-	-	-
62	04/08/77	736	4900	Taltheilei Narrows	25/06/78	-	-	325	0.9	-	-	-	-	-	-
63	26/06/77	675	4400	"	10/08/78	-	-	410	1.1	-	-	-	-	-	-
								Mean		-	24.2	-	-	16	270

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